

## The Specific Obtunding of Sensitive Dentine Without Electricity.

By K. J. SCHUMANN, D.D.S., Athens, Tenn.

The obtunding of sensitive dentine by cataphoresis in the hands of the majority has proven that it is not a success. Direct applications of cocaine crystals with the dampened pledget of cotton with the electric current as a conveyer sounded well, but has not proven, as I say, efficacious. The dental profession, as a whole, will welcome the obtunding agent that I wish to call attention to, because of its general adaptability.

The coal tar products, as a rule, all have some local anesthetic properties. Working along the line of purely local application, without the electric current, these products first arrested my attention. The older products were tried one after the other, but invariably gave negative results Coming down to the more recent products, my experiments lead me to hemicranin.

This drug is a beautiful white crystalline powder, almost totally tasteless, perfectly odorless, and when combined with the proper menstruum is what I believe to be the ideal obtundent.

An obtunding agent to be perfect should present many features some dentists desiring an agent that works one way, others another way Hemicranin is perfectly harmless. The cavity may be packed full, and no danger from an accident. On the other hand, if cocaine were swallowed in any quantity, it is dangerous. The ease of adaptation is of importance. Hemicranin may be applied anywhere. In five-grain doses it is almost magical in its action in facial neuralgia. The dental profession seems to have failed to appreciate an obtundent of dentine as much as the anesthetics in extraction. Since electricity failed, everybody gave up. These anesthetics and obtundents, I believe, would be more thoroughly appreciated if no cocaine were in the formula; therefore, my object has been to find a solution for the problem, and hemicranin solves it. Here is the manner in which it may be used:

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Hemicranin, few grains.

Sp. nitrous ether, qs. to make thin paste.

Sig. Apply to cavity, allow to remain until ether evaporates, then excavate. If this application should not answer, use same again, and wait until ether evaporates, then seal with cement and leave for an hour or until next sitting.

There is nothing that will prove more satisfactory. The action of hemicranin differs from every other drug used in the series of experiments. The dentinal tubuli, instead of becoming closed from its application, receives it in solution, therefore obtunding the tract to be worked over quite a distance in line of tubuli. This drug sealed in cavity, covered with a paraffine dressing and further cements three days was found to have been absorbed; not a trace could be found in cuttings from the cavity walls. Chloroform seems to act nearly as well as the ether, only slower in evaporation.

Method of Using,

In placing hemicranin in cavity, always use rubber dam where practical. Proceed as follows: Apply dam, dry out cavity thoroughly, using warm air. Clean away as much debris as possible; intro-

duce some warm alcohol, if patient cannot stand cold; wipe out cavity with the alcohol, allow it to evaporate and then apply the mixture of hemicranin as directed above.

I realize that the dental profession is not apt to embrace this new obtundent without investigation, therefore I will give clinical history with records of cases.

Along with the treatment by medications of sensitive dentine, operative procedure plays a most important part. The thorough knowledge of the instrument used, the perfect manipulation, as well as speed, all play leading parts. A patient treated rapidly as well as painlessly is an achievement of good dentistry to be seriously considered.

To work rapidly, one needs faultlessly sharp instruments. In using an obtunding agent, the excavator and bur should be as carefully examined as the cavity. No obtundent will give thoroughly satisfactory results without the smaller details of dryness of cavity, speed of engine and sharpness of burs are carefully considered. In the preparation of the ordinary cavity for, say, the amalgam filling, nearly every dentist disregards dryness of cavity. To be sure, those operators who always apply the dam, need pay but little attention to moisture, as it does not exist. But those who use the engine, but without the dam, should consider, first, dryness of the cavity.

In the filling of a tooth where there exists only partial sensitiveness, the need of careful manipulation of the instrument and a dry cav-

ity is sufficient. In excavating this class of cavities, dry with pledgets of cotton and excavate; if with engine, run it rapidly, always using a draw cut where possible. Never cut after saliva has invaded the cavity. Remove instrument and dry cavity as before. This procedure will make many grateful patients.

The most common form of sensitiveness I have met with is a condition where pulp exposure obtains in central and lateral incisors, superior and inferior. I invariably use the preparation of hemicranin in excavating this class of cavities. Its action is more prompt than cocaine crystals, and the results far more gratifying.

#### Creatment of Sensitive Abrasions.

There exists a condition of hypersensitive dentine from mechanical abrasion that may be considered here. In the mouths of the old, mastication gradually wears away the grinding surfaces of the teeth, until in some cases hyperesthesia of pulp and

peripheral nerve ends in tubuli exists and becomes necessary to treat. In these cases hemicranin is not applicable alone. Fortunately, so few of these cases present for treatment, we are not often called upon to give relief. Nature, by causing the recession of the pulp within the canal, has rendered us valuable assistance. However, the treatment I employ in such case is: Dry off surface of tooth to be treated; isolate it, if need be; rub together equal parts of hemicranin and silver nitrate; add on glass slab, one drop of nitric acid. Take a pledget of cotton and saturate it with this mixture and apply it to surface of the tooth. Allow it to remain a few moments, then wash off with syringe full of water. This treatment will suffice for several months, but must necessarily be repeated when, by the mechanical abrasion, the tooth again becomes worn.

#### Hemicranin in Dental Diseases.

I invariably use hemicranin in connection with silver nitrate in treating caries in deciduous teeth, applying it with equal parts hemicranin and nitrate silver. Right here I would say that hemicranin in connection with pot chlorate is a very useful thing

in acute stomatitis. In apthous or ulcerous stomatitis, previous to using pot. chlorate and hemicranin, the two per cent solution protargol as wash is beneficial. In pyorrhea, equal parts silver nitrate and hemicranin applied to the denuded roots relieves considerable pain. The silver treatment, of course, could not be applied to front teeth on account of unsightliness from silver application. This silver nitrate and hemicranin is particularly adapted to cases where pyorrhea has extended sufficiently far to produce the denuded condition of root, and where caries has attacked the root high up.

In the beginning of phagedenic pericementitis, hemicranin saturated solution is indicated, preceded by ten per cent. protargol solution.

The cases given below are part of a carefully kept record of several hundreds of different operations. I take these out as characteristic cases.

In conclusion I wish to say that the thinking members of the profession will appreciate the value of the dry cavity in painless excavating in connection with whatever agent for the obtunding they may try. My experience with this hemicranin justifies the statement that it is the best agent I have ever used. In giving this report to the profession I would say that I will gladly answer any further inquiries regarding the use of the drug hemicranin that may not have been thoroughly explained in it. The condition of sensitiveness in healthy tooth structure, when exposed to the bur, is claimed by some to be an abnormal condition resulting from the general deterioration or degeneration of man. Be that as it may, teeth are sensitive, and the specific obtundent is a boon to suffering humanity as much so as the local anesthetic.

Patient with right upper central hypersensitive had had two cement fillings placed in cavity, being told by dentist to leave fillings until tooth became well enough to work on. On removal of these fillings, tooth was each time found too sensitive to fill. Patient came to me in July, and I removed part of the filling that had been left, the dentist before me being unable to go further. After this removal I applied hemicranin and ether. In ten minutes I excavated and filled this cavity with gold. My patient said the operation was not painful.

Mrs. S. called for filling in lower cuspid. On examination found the most sensitive cavity I have ever seen. The patient simply could not bear the cavity to be touched. I managed to get her permission to wash out the cavity with warm water. I tried at four different sittings to simply remove the decay, but failed to do enough to justify proceeding. I was, at this period, experimenting with hemicranin. After arriving at the conclusion that I was on the right track, I placed some hemicranin in the cavity and sealed it up for about five minutes. On removing the dressing, I was surprised to find that I could readily remove the decay. I prepared this cavity and introduced one of the largest contour fillings I have ever put in.

Young man of eighteen called with broken incisor traumatic injury, but scarcely invading pulpochamber. Being two days since injury, the tooth was awfully sensitive. This patient asked for the electric current, which

I gave without results of any favorable nature. Finally I applied hemicranin, and succeeded in drilling pits for porcelain inlay tips.

Denuded roots with carious distal root and caries of bifurcation of both distal roots. called for treatment of wisdom tooth. Had never had tooth examined, so thought he simply had distal cavity. On examination I discovered a pericementitis of long standing with both distal roots completely denuded, a cavity on the buccal surface of one, and a cavity right in the bifurcation. Patient wanted to save this tooth, so I proceeded to excavate after first applying hemicranin, as cavity was too sensitive to touch. This tooth was cleaned and the cavities excavated with the greatest difficulty. The roots were very sensitive, as were both cavities, and required constant care to avoid invading pulp chamber. The cavity on root extended into the pulp canal. I repeatedly applied hemicranin to this cavity, and finally reduced the sensitiveness to such an extent as to work with ease. The cavity in root was filled with a lead disk over exposure and cement filling over that, finally ending with copper amalgam. The cavity in the bifurcation was extremely sensitive, and I was compelled to use hemicranin to fill. This cavity was filled with cement, both operations being successful. This patient has since been treated for general phagedenic pericementitis, hemicranin being used during treatment. He reports subsiding of pain after each application.

Young lady with both centrals badly broken down; had been under treatment at C—— for pulpitis, but obtained only temporary relief after applications. She came to me at dark, suffering terribly from pain in both centrals. On examination, I found no exposure but extremely sensitive dentine. Washed out cavities with tepid water, applied hemicranin to cavities and sealed up until next day. Also applied tincture aconite, and tincture iodine to gum above root. Patient reported following afternoon, and, after removing the temporary dressing, I was able to fill without any pain whatever. This patient had been under the treatment of two other dentists, of whom one at least had applied arsenic to both the cavities in the attempt to kill both pulps. She had also had the cataphoric apparatus applied without effect.

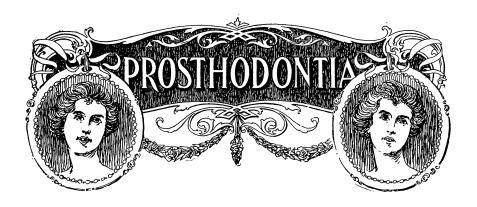
Young lady, seventeen years old. Filled some twenty cavities with hemicranin as the obtundent, the only thing of note being three gingival labial cavities on incisors. These cavities had been repeatedly filled and leaked badly each time on account of patient not being able to stand excavat-

ing. I applied hemicranin to each of these cavities and filled without causing any pain.

This case will, with case below, clearly demonstrate the efficacy of hemicranin in acute pulpitis. Young man with aching lower bicuspid called for treatment. I introduced nearly everything in the office, finally placing hemicranin in the cavity with chloroform and oil of cloves. Instant relief was the result. This application remained in this tooth for a month, the patient never being able to call and have it filled. A few days ago he called, and I found a direct exposure of pulp, and the pulp was as healthy as could be. I tried capping, and left some dry hemicranin in cavity right on the pulp. At present it is doing well. I have heard no unfavorable report from it.

This patient was myself. Having a lower bicuspid that was somewhat sensitive, I concluded to have an old filling removed that one of my classmates at college had placed in for me. On having the filling taken out, and after some little excavating, the pulp was found to be exposed. I never have suffered so much as when the filling was being removed. After the filling came out, I asked to place some hemicranin in the cavity. In a very short time the pain ceased. I insisted on not having the pulp killed, but was urged to do so. However, I had the doctor place in direct contact with the pulp some paste of hemicranin and clove oil, with just a drop of chloroform, allowing a moment for the chloroform to evaporate. This cavity was filled immediately, flowing some paraffine over cavity wall, then cement, afterward placing a metal filling over all. This tooth is in excellent condition and no soreness.

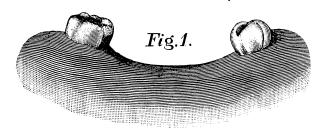




### Removable Bridge for Inclined Ceeth.

By A. E. H. LISTER, Lincoln, England.

As the title suggests, this is a removable bridge for cases where the piers lean, either together or apart; at the same time its uses are manifold.



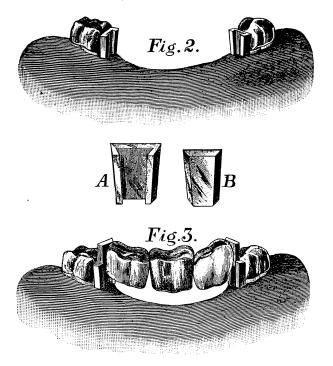
The conditions which will guarantee success are—That the crowns of teeth used as piers shall accurately fit the necks of the natural teeth, and that the slides be parallel with each other. (Fig. 1).

Take plaster impression of each pier separately, swage crowns in the ordinary way, then adjust female part of slide (a) to gum margin, place vertically on model and wax to crown. (Fig. 2).

Now try in the mouth and see that the slides are parallel with each other. Remove, invest, scald away wax; fill in with scrap and solder, dress them down, replace in mouth, oil, and take plaster impression,

which should come away clean, leaving the crowns on piers. Carefully replace crowns in impression, coat surface with usual separating fluid, taking care not to allow any to run in the crowns. Cast and draw same, and pier crowns will be found to occupy the same position as in the mouth.

Adjust the male parts of slides (b), grind in facings and swage caps in the usual way, keeping in mind that the male part of slide must be attached in the final soldering.



Extreme care must be taken to keep the solder from flowing on slides where they meet each other, or the sections will not go together. If they stick at all, a little oil and patience will soon make matters right.

In the final fixing after the crowns have been cemented on (Fig. 3), it will require no adhesive substance to fix slide as, because of its taper form, it is self-tightening.

The slides may be purchased in five different sizes from the Dental Mfg. Co., London, or can be made by any dentist of ordinary skill. If thought advisable, straight slides may be used instead of taper, and will not take so much time in making.

#### Porcelain in Dentistry.\*

By George W. Schwartz, M.D., D.D.S., Chicago, Ill.

Porcelain Crowns Without Bands.

There is no work done with porcelain in den tistry that has given so much satisfaction generally as porcelain crowns, as a rule it only being a question which is the best kind of a crown to use in each case. This chapter will embrace the several styles

of porcelain crowns, their uses, etc.

The first crown I will describe is a very easy one to make for both operator and patient. It is a porcelain crown without a band. I use this crown where I wish to get a very artistic effect, and for patients that are too timid to have much preparation done on the root. The root must be a good strong one, or the work will not be successful. When this crown is accurately constructed, it is very pleasing in its results.

Presuming it to be a central, lateral or cuspid, the tooth should be cut off almost to the gum line. The labial surface remaining should be ground concave from just below the gum line to the center of the tooth, and ground on a bevel from the center of the tooth to the gum line, ligually, giving it a wedge shape with the labial surface concave. (Fig. 18.)

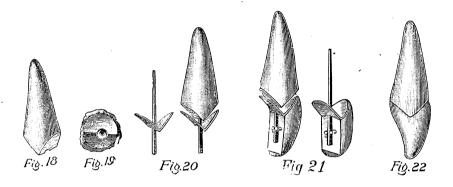
The root canal being previously filled with gutta percha (I use pink; I can see it in the canal and debris better), follow the gutta percha with a small bur, not too sharp, the length you desired for the post, gradually enlarging it with increased sizes of burs until it is as large as necessary for the diameter of the post, which should be sixteen, seventeen or eighteen gauge square iridio-platinum wire properly fitted in the canal, allowing an excess equal to one-half the length of the crown to extend from the canal to be used subsequently for attachment of the pins of the facing with solder.

Next, take a piece of soft, well annealed platinum plate about thirty-six gauge, a trifle larger than the end of the root, and approximately burnish it to the shape of the end of the root to be crowned. With the burnisher, locate on the platinum by an impression, the hole in the root for the post. This is a guide where to punch with the plate punch for the insertion of the post. (Fig. 19.) Carefully hold the platinum in

<sup>\*</sup>Copyright by the author.

place on the root with a pair of flat nose pliers, and push the post through the metal to place in the canal. The post and platinum will come away together without waxing in place or requiring investment. Solder the post and platinum together with pure gold, replace on the root and carefully trace the margins of the root with a foot shaped plugger, or other suitable instrument. Having this done, remove from the root and trim to the exact margins of the root. Anneal it, replace on the root and burnish the platinum in place to the end of the root. The metal work is now completed. (Fig. 20.)

Select a facing of the proper shade, and grind it to place with one pin on each side of the square post. The pins in the facing should have



the surfaces, coming in contact with the post, flattened to give a better attachment when soldered.

Holding the facing in proper relation with the metal work on the root with one hand, in the other hand take a suitable pair of pliers and pinch the pins of the facing to clasp the post. This will secure them together so that they may be soldered without investment. To do this I lay the piece of work in some asbestos fiber, slowly heat it up and solder with a fifteen or twenty per cent platinum solder. This can all be done with the ordinary blow pipe in an open flame. The tooth being soldered (Fig. 21), replace on the root to see if the platinum is still in its proper relation to it. When found to be so, remove it, build up with porcelain to the contour of the original tooth and bake it. This crown usually requires two bakings.

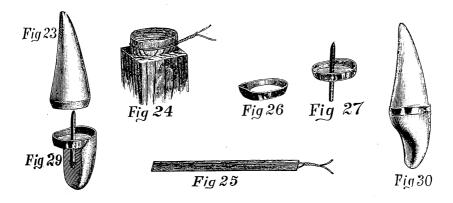
For further instructions in the work of carving and baking, the reader is referred to the chapter on carving and baking porcelain.

The crown being baked, remove the platinum from it by drilling through it with a very small round bur, keeping away from the post, pry

the platinum away from the margins without fracturing them and remove from the crown entirely, as it has now served its purpose, which is a matrix to bake the porcelain the form of the end of the root. I never leave it for it shows a dark blue line and spoils the beauty of the work. Fig. 22 shows the finished work in place on the tooth.

Porcelain Crowns With Banded Root. To prepare a root for a porcelain crown with a band, for a central lateral or cuspid, cut the tooth off to the margin of the gum, or a little beneath the gum line; with enamel cleavers parallel the root the width the band is to be, except at the labial surface,

which should be beveled (Fig. 23); with fine binding wire take a measurement of the root; with this measurement make an impression endwise on a piece of straight grained hickory wood, cut it down about the width



the band is to be until the wire will fit it accurately, as shown in Fig. 24. Cut the wire measurement close where it is twisted and cut the platinum for the band as shown in Fig. 25. The gauge should be twenty-eight, twenty-nine or thirty, as the requirements of the case would indicate. Solder the band together with twenty-five or thirty per cent platinum solder, fit it in the hickory form made from the wire measurement, fasten on the band, and file it to an edge that it will cause less pain to the patient when forced under the gum when the crown is set, and lessen the liability to irritation and the lodgment of foreign substances.

The band should fit close, be driven on and made to take the form of the bevel on the labial surface of the root. When finished it should resemble Fig. 26. The surface of the band coming in contact with metal cope or floor should be perfectly smooth and even; similarly the cope should be accurately adjusted to the band. It should be of twenty-eight

or twenty-nine gauge iridio-platinum, and soldered with platinum solder, twenty-five or thirty per cent platinum.

Fit a square iridio-platinum post in the canal. If it is for a cuspid, use a large sized post, about sixteen gauge; for laterals, use a smaller gauge; eighteen is usually large enough. The size of the root and the extent of strain on it should govern the size of the post used.

To locate where the post hole should be made in the cope, place a small quantity of wax in the cap, and press it to place on the root. The impression in the wax shows where the canal is. With a pointed instrument, mark through the wax where the hole is to be punched with a plate punch, remove the wax and punch the hole. With a small, square file (these files can be obtained where jewelers' instruments are sold), file the hole square that the post will fit accurately; replace the cap on

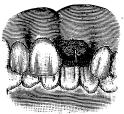


Fig 28

the root and drive the post to place. If it fits tightly enough, it will bring the cap with it when removed. Should it not do so, an impression should be taken, an investment made and the post and cap soldered together with twenty-five per cent platinum solder. Fig. 27 shows completed cap with post in place ready for the facing.

With the cap in place on the root, take a bite in wax or modeling composition; then take an impression in plaster. If the cap does not come away in the impression, remove it and put it in its proper position in the impression. Let a drop of hot wax run from a wax spatula down the post and fill the cap before the model is run. This facilitates its removal from the model afterwards.

Run a model in the impression with an extension to be used for articulating. Having the impression and model separated, place the bite on the model and with plaster run the articulating model. See Fig. 28. Heat the post and cap to warm the wax; with a pair of pliers draw the cap from the model; remove the wax from the cap and replace on the model. This makes its removal from the model easy when the facing is in place to be soldered.

Grind the thin facing to cover the labial portion of the band. This part of the facing should occupy the space of the lost enamel. Never allow a platinum band to show where it would be seen by the casual observer, nor leave a band uncovered beneath the gum where it shows. This gives a blue and unsightly appearance. Fig. 29 shows how a facing should be ground. Flatten the pins coming in contact with the square post. This gives a broader surface for the solder to cover, increasing the support of the porcelain. I usually pinch the pins to the post with a pair of stout pliers, remove the facing and cap from the model, lay it in some loose asbestos fiber and solder in an open flame. If preferred, it can be invested as is usually done and soldered. Use twenty-five per cent platinum solder. Thoroughly remove all investment after soldering. The case is now ready to carve and bake. When finished, should be as Fig. 30 indicates.





## Impression Devices and Wing Plates.

By Dr. W. E. Gorham, Wiscasset, Me.
Read before Maine Dental Society at Brunswick, Me., July 17, 1900.

In lieu of a better term, the device which I illustrate today I call a wing or flange plate, because of the difference between it and the common class of lower plates. I present this for two reasons.

I—It has brought health and happiness in some degree to the afflicted.

2—I have used the method for years with only a few failures.

This method must possess some merit because, by its use, I have enjoyed a degree of success with lower plates unattainable by me without it. Whether it possesses the merit of originality I leave with you, though I had never heard of the method when it came to me.

A Difficult Case
in
Practice.

This was some six or seven years ago, on being called to the home of a former wealthy ship owner's invalid wife, who, for very many years, had in vain tried in Boston, New York, and, I think, in Germany, to get a lower denture with which she could

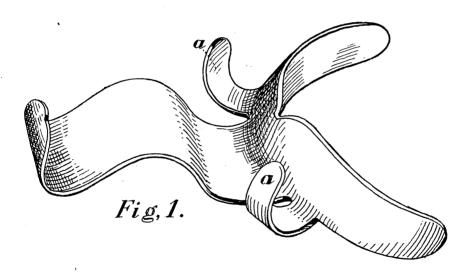
eat. It is unnecessary to discuss why a green country dentist was called to attend this lady who had been the patient of the great and skilful. For twelve years she had suffered with her many plates before the last one was made.

Her first question was this: "Can you make me a better plate than the best of these?" Evidently she doubted my ability. I did not wonder at it, with her experience. Probably I had a discouraged look, for I felt that way when I saw the five beautiful works in celluloid, vulcanite, silver and gold for which she had expended hundreds in vain. I marveled why some one of these great and skilful artists had not succeeded,

but such was the fact. Though her Boston dentist, twenty years before, made her a perfect upper set, the lower set was a failure, and he was honest enough to tell her he could not fit her any better, and he doubted if she ever could be fitted.

On examining either side of this lady's mouth, from the retreating chin to the ramus, the observer could not fail to note several types of difficulties often met, such as the loose and flabby membrane between lip, tongue and cheek overhanging the short, depressed and narrow half arch, the basilar portion only remaining.

I dared not think aloud, for I was confronted by my greatest problem in prosthodontia. Were the common dentist to work a lifetime,



he could not excel in beauty, nor possibly in utility, the artistic efforts of skilful masters who had vainly tried to make this woman eat as in her youth. Then the invisible dental censor whispered: "In a case like this, why not lock your plate to place with two under flanges hugging the downward and backward diverging convex curves within the lower quarters of the rami?" Then a temporary flood of confidence and faith swept over me, and I told that long-suffering victim of lower toothlessness that I would make her eat "like a happy girl," or charge her naught.

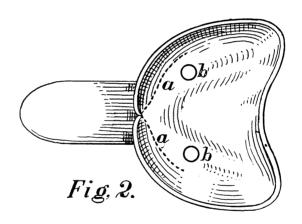
This lady was asked to adjust her best set, the sides whereof were very short and curved. Toy with the protruding incisors, and this plate

would dance; bear down an ounce on the centrals and the heels would strike the upper arch and prop the mouth agape—a full note—the abnormal key of 'O' giving the victim what the poet calls the "open countenance." When this plate floated in the valley of the arch (the ridge had long since gone), the membranous folds beneath it served as an elastic cushion.

Method of Caking the Impression.

The tray with modeling compound was adjusted, and while held with the thumbs, the forefingers spread the compound beyond the tray, over the curves of the jaw, opposite the retracted tongue, and held it there till quite hard; then the handle was

gently elevated, the right heel shoved back toward the pharynx, elevated



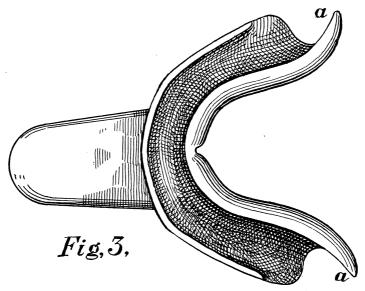
and brought forward, unlocking the impression, which was then fully hardened, shaved down and readjusted so that the tongue could move freely and unimpeded in any direction, a condition indispensable to any lady's happiness.

I noticed that a number of pounds could be attached to the tray handle, held horizontally without tripping, while the muscles acted, the head moving back and forth, and the tongue wobbling freely without discomfort.

Very fortunate was it for this patient and operator, that the first attempt was more successful than two or three subsequent trials with others soon after, because, had I failed at first, and had time to review my rusty anatomy, and reason over it, and the directions of the books for taking lower impressions, I would possibly have been discouraged and given it up as impracticable.

I adjusted her new set. The incisors were fully five-sixteenths of an inch forward of the line where the ridge ought to have been. She bit through a hard apple, and a happy smile followed a look of woe. I asked her to remove the plate; she failed, and the look of woe returned. After tugging in desperation for a while, she made the remark: "The others would not stay in, and this one I cannot get out." With some difficulty I pacified her, and showed her the way; then the smile returned, and is there to stay.

This case has been presented at some length, because it illustrates so many difficulties with lower plates, and in some respects is the most marked case I have seen.



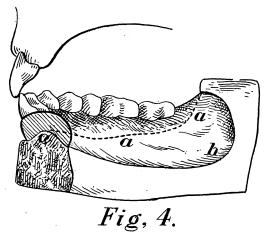
In flasking many of these trial plates, one may facilitate operations or economize material by making the mould in four parts instead of two.

It is no easy task to make a perfect impression for some of these cases. I have been obliged in some cases of narrow jaws, wide tongue and thick, muscular cheeks to take one side of the impression at a time. Whoever can make a first class lower plate in the common way can readily take one more step and satisfy more cases.

Many mouths are all right for well made common plates, and no flanges are needed, but perfectly fitted wing plates may be made to bring an equal source of comfort and health to most of the unfortunates. I know the objection may be raised that these flanges rest on muscular tissue. To some extent that is true. That fact was the source of my objections, before the first plate reached the mouth,

We must bear in mind that the human tongue is not like a cow's, thrust out while feeding, yet we must respect with our wings, the muscles that move the hyoid bone and depress the inferior maxilla. Right here a side thought comes in.

The or an upper plate satisfactory, we must deal with Personal Equation. problems out of the mouth, above the eyes, even make an impression on the brain. To illustrate: A patient of moderate intelligence, weak will and indecision brings a perfect mouth to the best prosthetic worker in this hall for a set of teeth. The dentist adjusts a perfect set. With a vacant stare, the numb brained creature grasps the incisors with thumb and finger; they feel



differently from nothing in the mouth; she tries with might and main to move them about, and if muscle succeeds, oh, happy feat. Her countenance illuminates; she feels she's "got that hateful old tooth jabber down," for his "old, nasty teeth won't stay up," and if she does not succeed, her thickened voice is heard in anguish: "Oh, dear, I never can wear these old things in the world, they do not feel like my natural teeth." Again comes to the same office, a patient of intelligence and force of character, fully realizing she has something to do and to learn, that it is a matter of education for her to wear teeth in a mouth flat as a pancake and hard as a bone. The dentist makes her a set no better than the other case, and she readily proves matter subordinate to mind, and learns to use her teeth for what they were made to do. She takes due credit herself, gives the dentist his, and rewards him cheerfully. Such has been my experience,

After wearing flange plates a while, I sometimes hear a patient say, "It hurts me to swallow." Then I find out where. Sometimes it is one wing, sometimes the other, sometimes both. I cut away and round the edges till the patient is comfortable, then stop. Sometimes I have to cut away enough to lift one or both heels, but very rarely. One of my angels has for two years been successfully flying with one wing, and though she has done some lofty soaring, she has had no sore mouth since I clipped her right wing, and the left has anchored the plate in an educated mouth.

Gentlemen, I leave the matter in your hands for consideration or reconsideration, as the case requires, and criticism, adverse or otherwise.

Description of Tillustrations.

Fig. 1 is a cheek and lip distender to aid in examining the oral cavity, and to insure better control of the mouth in taking impressions, upper and lower. Spurs a-a serve only to control a drooping mustache. Made of aluminum 16 to 20 gauge.

Fig. 2 shows upper tray sawed on dotted lines a-a from median line half way to heels to facilitate removal of model if dovetailed in plaster impression. Air escapes are shown at b-b.

Fig. 3 is a lower impression in compound taken in common tray, and a-a are wings of impression extending under rami to be reproduced in plate to lock the latter in the mouth.

Fig. 4 is inner view of right half of lower teeth divided in median line, also superior central. Dotted line a-a-a shows upper outline of right half of plaster model of arch or crest of ridge. Extent of right wing is seen at b.

# "Dental Jurisprudence in Its Relation to State Examining Boards, the Profession and the Laity."

By J. Allen Osmun, M.D.S., Newark, N. J.

Read before the New Jersey State Dental Society, July, 1900.

Since January, 1900, there have been published every month, a series of articles in the *Medical Brief*, from the pen of Dr. R. C. Bailey, of Illinois, in which he has taken very decided views as to the rights, privileges and immunities of physicians in regard to the rights of examin-

ing boards and boards of health to control the practice of medicine. As the rights and privileges of the dental profession are the same as those of the medical, and as what affects one affects the other, I was, of course, intensely interested. There also have been other articles and editorials in this same journal along this line, and I have come across a number of essays in other periodicals, touching upon this subject, which I have read with great care. I was struck at first with the plausibility of the arguments, but on closer investigation and more careful reading, I was convinced that the line of argument was illogical.

In brief, the position of the various writers was along the line that the Constitution of the United States gave certain rights that could not be taken away; that it gave the right to every citizen of this country to life, liberty and property, and that no one could be deprived of any of these personal privileges without due process of law; and the main point of the argument, as I saw and understood it, was that when a person spent money, time and labor acquiring a professional education, this skill and technical knowledge became his property, and he ought not, and in fact could not, legally, be debarred from its exercise anywhere in the United States, examining boards or boards of health notwithstanding.

These writers also took the position that if the person was not competent, the place to go for redress was back to the institution granting the diploma, and take from it its charter, or let the individual go on in his own sweet way until he was found unworthy by the public, or had transgressed so far as to be amenable to the law as any other law breaker, and to suffer such punishment as the case demanded.

With these facts and arguments in my mind, I submitted to legal counsel some questions, and the balance of this paper is largely made up from quotations and opinions submitted by legal friends, and such extracts from periodicals as I thought would make clear the points I wished to present.

You perhaps noticed that Dr. Sheppard in his remarks at the Kingsley Dinner, used the following language in regard to the influence of the examining board on dental education. After speaking of the unselfish and useful labor of the dental professors, and the influence of dental societies as an educational factor, he says:

"Above all other influences combined, the thing which we today must recognize as the great lever which is moving us in the educational line is, as has been, the state dental law."

If this be true, how important it is that we should give this subject our most earnest thought, and if there is anything wrong in the law, or unjust in its enforcement, we should look at it with judicial minds. I am inclined, so far as my limited knowledge gained by reading and investigation goes, to fully endorse the conclusions of Dr. Sheppard.

With these thoughts and views I submitted the two following questions to counsel:

First.—Has the state the power to prescribe the qualifications and conditions upon which a person shall be admitted or licensed to practice the profession of dentistry?

Second.—Has the state the power to regulate and control the practice of this profession, after a person has once been admitted or licensed to so practice?

We will assume that the profession of dentistry

\*\*Puthority of the State\* is one of the skilled and learned professions, standing on the same basis as law or medicine. Whatever power the state has over the matters referred to it, is derived from what is called the "police power."

Police power in its broadest acceptation, means the general power of a government to guard and preserve the public welfare, even at the expense of private rights. Police power is devoted principally to the care and preservation of the public health and morals, and is commonly exercised in restricting the actions of individuals, and in regulating their use of property. This power is one of the inherent powers of government, and like the power of "eminent domain," it exists independent of the constitution and is limited, rather than created, by the constitution. power is of necessity despotic in its character, commensurate with the sovereignty of the state; and individual rights of property beyond the express constitutional limits must yield to its exercise." It is from this power that the state derives its right to enact laws regulating matters relating to public health and quarantine. The power of the state to regulate the speed at which steam railroad companies may operate their cars through populous cities, or at which trolley cars may be run on public highways, is derived from this police power. The power of the state forbids the slaughtering of cattle within certain limits; prevents the adulteration of food products and the pollution of water sources, and regulates the location of burying grounds. It prohibits the practice of dangerous or noxious professions, and restricts the sale of injurious drugs or intoxicating liquors.

Police power can only be exercised by legislative enactment, and it rests solely within legislative discretion to determine when the public welfare or safety requires its exercise. It is an established principle in this country, that so long as the legislature does not pass the limits fixed by the constitution, the courts have no authority to interfere on the

ground that the legislative acts in question violate a natural principle of justice and right.

The whole doctrine may be thus summed up: "It is the province of the law-making power alone to determine when the exigency exists for calling into exercise the police power of the state." The power of the legislature to prescribe the qualifications and conditions upon which persons shall be allowed to practice the learned professions, has from the earliest days of the common law, been sustained. This firmly settled doctrine is well stated by Tiedman in his work on "Limitations of Police Power," page 200:

"When the successful prosecution of a calling requires a certain amount of technical knowledge and professional skill, and the lack of them in the practitioner will result in material damage to the one who employs him, it is a legitimate exercise of the police power to prohibit anyone from engaging in the calling, who has not previously been examined by lawfully constituted authority, and received a certificate in testimony of his qualification to practice the profession. The right of the state to exercise this control over the skilled and learned professions has never been seriously questioned."

Cooley, in his work on "Torts," page 289, affirms the same doctrine and states it in even broader language than Tiedman.

. Legal Precedents. From the great number of decisions that have been rendered by courts of last resort, sustaining this doctrine, I will call your attention to three cases. In the case of Wilkins against the State, 113 Indiana,

page 514, the Supreme Court of that State says:

"There is entire harmony in the adjudged cases upon the question of the power of the legislature to enact laws prescribing what qualifications a person shall possess, who enters upon the practice of a profession requiring professional skill and learning. From the earliest years of the common law, men who engaged to possess skill and learning had to obtain evidence of their qualifications from the sources designated by law. A long and unvarying line of cases extending from these early years of the law to the present time, sustain this doctrine. The legislative judgment that the welfare of the public requires that those practicing the profession of dentistry shall possess the necessary skill and learning, and shall obtain a certificate, is probably conclusive. The legislature as the law-making power, has authority to prescribe the method of procedure. This authority does not end with declaring what qualifications he who enters upon the practice of that profession shall possess. As it has plenary powers over the whole subject, it alone must be the judge of what is wise and expedient both as to the qualifications required, and

as to the method of ascertaining those qualifications. The courts cannot exercise any supervisory power over the legislature so long as it keeps within the limits of the constitution."

In the case of the State vs. Vanderslouis, 42 Minn., page 129, the Supreme Court of that state says:

"That the legislature may prescribe such reasonable conditions upon the right to practice medicine or law, as will exclude from the practice those who are unfit for it, is so well settled by opinions of the courts as to be no longer an open question. The power rests upon the right of protecting the public against the injurious consequences likely to result from allowing persons to practice these professions who do not possess the qualifications essential to enable the practitioner to practice the profession with safety to those who employ him. The same reasons apply with equal force to the profession of dentistry, which is in law but a branch of the medical profession. That in the exercise of that power the legislature may require as a condition of the right to practice, that the person shall procure a license, may determine whether the applicant possesses the qualifications required to entitle him to it, and may prescribe, so far as can be done by a general law, what qualifications shall be required, and how the possession of them by the applicant shall be ascertained, necessarily follows from the power itself. It is for the legislature and not for the courts to determine these things."

The Supreme Court of the United States has

4. S. Supreme Court

Decision.

The Supreme Court of the United States has
passed on all the questions involved, and the opinion
of that court is of course binding and final. The
case referred to is that of Dent vs. West Virginia.

This case came up on appeal to the Supreme Court of the United States, from the Supreme Court of Appeals of the State of West Virginia. On March 15, 1882, the legislature of the State of West Virginia passed an act prescribing the qualifications and conditions upon which the profession of medicine should thereafter be practiced in that state. The Ninth section of this act provides that the following, and no others, shall hereafter be permitted to practice medicine in this state:

First.—Graduates of a reputable Medical College in the School of Medicine to which the person desiring to practice belongs.

Second.—All persons who have continuously practiced in that state for ten years prior to March 8, 1881.

Third.—All persons who might be admitted to practice on an examination by the state board of health of West Virginia.

Dent was a physician and had been practicing in the town of Newburg, Preston County, in the State of West Virginia, continuously since

the year 1876, and had enjoyed a lucrative practice, publicly professing to be a physician, prescribing for the sick, and appending to his name the letters M.D. He was a graduate of the American Medical Eclectic College of Cincinnati, O. He presented his diploma to the board of health, and asked for a certificate as required by law, but the board refused to give him the certificate asked, because, as they claimed, the college from which he graduated did not come under the word "reputable" as defined by the state board of health. Upon the refusal of the board of health to grant him the certificate, Dent continued to practice as a physician and was indicted for a misdemeanor under the act, was tried and convicted, and his conviction was sustained by the court of last resort of the State of West Virginia. An appeal was taken to the Supreme Court of the United States on the ground that the West Virginia act was unconstitutional. The case was exhaustively argued before the Supreme Court of the United States and the opinion of the court was delivered by Mr. Justice Field. In this opinion Justice Field says:

"The unconstitutionality asserted consists in its alleged conflict with the clause of the 14th Amendment, which declares that no state shall deprive any person of life, liberty or property without due process of law—the denial to the defendant of his right to practice his profession without a certificate required by law, constitutes the deprivation of his vested right and estate in his profession, which he has previously acquired.

"The power of the state to provide for the general welfare of its people, authorizes it to prescribe all such regulations as in its judgment will secure, or tend to secure them against the consequences of ignorance and incapacity as well as of deception and fraud. As one means to this end it has been the practice of different states, from time immemorial, to exact in many pursuits a certain degree of skill and learning upon which the community may confidently rely, their possession being generally ascertained upon an examination of parties by competent persons, or inferred from a certificate to them in the form of a diploma or license from an institution established for instruction on the subjects, scientific or otherwise, with which such pursuits have to deal. The nature and extent of the qualifications required must depend primarily upon the judgment of the state as to their necessity. If they are appropriate to the calling or profession and attainable by reasonable study or application, no objection to their validity can be raised because of their stringency or difficulty. It is only when they have no relations to such calling or profession, or are unattainable by such reasonable study and application, that they can operate to deprive one of his right to pursue a lawful vocation. Due consideration for the protection of society may well induce the state to exclude from practice those who have not such a license, or who are found, upon examination, not to be fully qualified. There is no arbitrary deprivation of such right where its exercise is not permitted because of a failure to comply with conditions imposed by the state for the protection of society.

"The same reasons which control in imposing conditions upon compliance with which the physician is allowed to practice in the first instance, may call for further conditions as new modes of treating diseases are discovered, or a more thorough acquaintance is obtained of the remedial properties of vegetable and mineral substances, or a more accurate knowledge is acquired of the human system, and of the agencies by which it is affected. It would not be deemed a matter for serious discussion that a knowledge of the new acquisitions of the profession as it from time to time advances in its attainments for the relief of the sick and suffering, should be required for continuance in its practice, but for the earnestness with which the plaintiff in error insists that by being compelled to obtain the certificate required, and prevented from continuing in his practice without it, he is deprived of his right and estate in his profession without due process of law. We perceive nothing in the statute which indicates an intention of the legislature to deprive one of any of his rights. No one has a right to practice medicine without having the necessary qualifications of learning and skill, and the state only requires that whosoever assumes, by offering to the community his services as a physician, shall present evidence of it by a certificate or license from a body designated by the state as competent to judge of his qualifications. There is nothing of an arbitrary character in the provisions of the statute in question. The law of West Virginia was intended to secure such skill and learning in the profession that the community might trust with confidence those receiving a license under authority of the state."

State Laws Not Uniform. It will be observed that this decision fully sustains the power of the state to impose such conditions as to qualifications on the part of those desiring to practice the learned professions as the legislature

may deem necessary for the proper protection of the public. The power and control of the legislature over those practicing the learned professions is a continuing power which may be exercised at any time. This doctrine is in accord with public policy, for it not only protects the public, but it dignifies the professions, and gives to those practicing them a standing which they could not otherwise acquire.

Each state determines for itself what the qualifications for practicing the learned professions shall be, and how those qualifications shall be ascertained, and what evidence of possessing them shall be required. When the legislature has expressed itself in regard to these matters by legislative enactment, such enactment becomes at once binding upon all who may wish to practice any of the learned professions within that That the requirements should be different in different states is unfortunate, but the same condition exists regarding the whole body of our statute law. The tendency of modern legislation is toward uniformity between the different states, and active efforts are being made to secure uniform legislation in the several states on such subjects as marriage, divorce, commercial paper, assignment, attachment, descent, distribution, and other subjects. The requirements for admission to the bar of the State of New Jersey differ very materially from the requirements of the State of New York. Efforts are being made to have these requirements made uniform, and it is undoubtedly desirable that the same should be done in the professions of dentistry and medicine. Each profession, however, must largely determine these questions for itself, and the result depends almost entirely upon the efforts of the members of the respective professions.

From the series of articles by Dr. R. C. Bayley, published in the Medical Brief, which have been referred to, I have no doubt that the Doctor is a skilful physician, but his law is fearfully and wonderfully made. Either he or the Supreme Court of the United States is wrong. From a legal standpoint his reasoning is so illogical and his conclusions are so absurd that it is not necessary to give them more than a passing notice. Many writers seem to think there is some special virtue in having a diploma from an incorporated institution. The Supreme Court disposes of this contention in the Dent case above referred to. Again it is seriously argued that because one has been admitted to practice in one state he has a constitutional right to practice in any other state. In support of this contention, it is stated that the provisions of our Federal Constitution, declare that the "Citizens of each state shall be entitled to all the privileges and immunities of citizens in the several states." This provision of our Federal Constitution does not mean that a citizen of the State of Indiana, who comes to the State of New Jersey, brings with him into this state the privileges and immunities which he enjoyed as a citizen of the former state, but rather upon his arrival in this state he at once becomes possessed of all the privileges and immunities which pertain to citizenship in this state. Because a citizen of South Dakota can, for instance, obtain in that state what is practically an instantaneous divorce, it would not follow that a citizen of that state, coming into the State of New Jersey, would be entitled to demand from our courts a like divorce. The privileges and immunities referred to in the section of the Constitution quoted, are those only which belong to state citizenship. The courts

have held time and time again that this provision simply means that when a citizen of one state goes into another state, he is entitled while there, to the privileges and immunities of citizens of the latter state, and that is all this section of the Constitution means.

In the articles referred to, the Doctor also argues that a license to practice medicine is a judicial record or proceeding within the meaning of the provision of the Federal Constitution, which provides that full faith and credit shall be given in each state to the public records and judicial proceedings of every other state. This is absurd. A license is in no sense a judicial proceeding or a public record, within the meaning of that provision of our constitution, and even if it were, the only force and effect such a license could have in another state, would be to operate as evidence that the holder was entitled to practice his profession in the state in which he obtained his license. His proposition amounts to this: The State of New York may license a man to practice as a physician in the State of New Jersey. The mere statement of the proposition is its own refutation.

In the United States, the police power belongs to the several states, and not to the federal government, except so far as Congress may exercise it over the territories and the District of Columbia.

In the case of the United States vs. De Witt, 9 Wall, U. S. 41, the court says that this principle is so well fixed as to be beyond all controversy. This principle is not affected by the 14th Amendment, and Congress cannot, in pursuance of it, exercise control over affairs of police in the states. Therefore the police power so far as it relates to the matters under consideration, is lodged solely in the law-making branch of our state governments. They have exclusive jurisdiction over these matters.

Whether any particular statute that may be enacted, touching the matters in question, is constitutional, is a question depending entirely upon the provisions of the statute in question. If its provisions are within the scope of the principles above laid down, and are limited to a proper exercise of the police power, such a statute is beyond question, constitutional. If the foregoing has any basis of fact, then we may conclude:

Power of the State.

First.—The state has the power to prescribe the qualifications and conditions upon which a person shall be admitted or licensed to practice the profession of dentistry.

Second.—The state has the power to regulate and control the practice of this profession after a person has once been admitted or licensed to so practice, and may, in its discretion, from time to time, change or increase the required qualifications as to new applicants for such license.

Third.—The state has the power to prescribe the procedure by which the possession of the required qualifications shall be ascertained, and may prohibit a person not duly licensed, according to the established procedure, from practicing any of the learned professions.

Fourth.—Each state prescribes its own qualifications, and establishes its own procedure, and a license granted by one state has no force or virtue in another state, except so far as the same may be recognized by the laws of the other state.

Preliminary Requirements in New Jersey. It is important for us to know what is meant by the words "a preliminary education equal to that furnished by the common schools of this state," as the same are used in section 3 of the Act of 1898, in prescribing the qualifications necessary to entitle a

person to be examined by the State Board of Registration and Examination, with a view to obtaining a license to practice dentistry in this state.

It clearly appears from the last annual report of the State Board of Registration and Examination, that this language is supposed to include the education ordinarily provided by the high schools of this state. The question presented may be stated thus: Is the high school, as the same is ordinarily provided in the larger cities or wealthier districts, a part of the common school system of this state?

The Constitution of this state provides in article 4, section 7, subdivision 6, as follows: "The legislature shall provide for the maintenance and support of a thorough and efficient system of free public schools, for the instruction of all children in this state, between the ages of five and eighteen years."

It would seem to be entirely clear that the school meant by the words "The common schools of this state," must be schools established pursuant to the constitutional provision above quoted. In the case of Landis vs. School District No. 44, 28 Vroom, page 509, Justice Dixon, in rendering the opinion of the court, says:

"Nor can I think that the constitution requires the legislature to provide the same means of instruction for every child in the state. A scheme to accomplish that result, would compel either the abandonment of all public schools designed for the higher education of youth, or the establishment of such schools in every section of the state within reach of daily attendance by all the children there residing. Neither of these consequences were contemplated by the amendment of 1875 (that is, the provision of the constitution above quoted). Its purpose was to impose on the legislature a duty of providing for a thorough and efficient system of free schools, capable of affording to every child such instruction as is necessary to fit it for the ordinary duties of citizenship; and such pro-

vision our school laws would make, if properly executed; with the view of securing the common rights of all before tendering peculiar advantages to any. But, beyond this constitutional obligation, there still exists the power of the legislature to provide, either directly or indirectly, in its discretion, for the further instruction of youth in such branches of learning as, though not essential, are yet conducive to the public services. On this power, I think, rest the laws under which special opportunities for the education at the public expense are enjoyed."

I understand the court to mean that the constitutional obligation imposed on the legislature is to provide for a thorough and efficient system of free common schools, capable of affording to every child such instruction as is necessary to fit it for the ordinary duties of citizenship, but beyond this constitutional obligation, the legislature has the power to provide special opportunities for the further instruction of youth in such branches of learning as, though not essential, are yet conducive to the public service.

Our school law provides for a system of public instruction in every school district of the state. This is the constitutional obligation. Peculiar advantages are provided in the larger cities, and wealthier districts, but these peculiar advantages are not provided in the discharge of the constitutional obligation placed on the legislature, but rather by the exercise of power existing in the legislature beyond the constitutional obligation.

A distinction must be drawn between our free schools and our common schools. Free schools may be of any grade the legislature, in its discretion, may see fit to provide. For instance, our state provides free scholarships in Rutgers College, and a Free State Normal School. Neither of these institutions is a part of our common school system. The common schools are the schools universally existing in this state in every school district, established therein by authority of the legislature pursuant to the constitutional obligation. Our common schools are provided primarily for children between the ages of five and eighteen years, and are open to all. In my opinion the high school is not a part of our common school system, but is rather an addition to it. The high school, even in the school districts where it exists, is not open to all, but only to those who have shown a certain degree of proficiency in the common schools. It is intended for scholars of more mature minds, and affords the peculiar advantages and special opportunities referred to by Mr. Justice Dixon in the Landis case.

There are in this state a very large number of school districts in which the high school does not exist. Every school district has its common schools, and a boy who has acquired all the learning which the public schools of his school district affords, has certainly passed through

the common schools. He has no legal right to attend any other public school except by permission which may or may not be granted. He has in my opinion completed his common school education. If this be true, a preliminary education equal to that furnished by the common schools of this state, is meant such an education as is derived from attending the common schools as has above been defined, and graduation from a high school is not a necessary preliminary qualification to entitle a person to an examination for a license to practice dentistry in this state.

On a careful examination, then, of the trend of advancement in the dental profession, we must fall in line with the advanced positions of education. At a meeting held in Library Hall, at Columbia University, a plan was considered by many of the leading colleges of the Eastern and Middle States, to hold a uniform extrance examination, and it was favorably acted upon. It would seem that this would be an auspicious time to inaugurate some scheme or promulgate some plan whereby all examinations by state boards, could be held on the same date in every state in the Union, and all questions propounded to students should be the same, and then, when an examination had been once passed, it should enable the practitioner holding such a certificate, to practice his profession anywhere North or South, East or West, within the confines of this glorious Union, or in any of our distant isles where "Old Glory" floats.

To recapitulate, then, under the law as it now exists, we conclude:

First.—If a person acquires the right to practice by study, examination and license, the insistment that, by reason of these rights, he must, by the Constitution of the United States, be allowed to practice anywhere in the United States, is untenable.

Second.—That the state has the power to enact such laws and regulations as shall determine the conditions and qualifications necessary to admit a person to practice any of the learned professions.

Third.—That the state also has the right and power to regulate and control the practice of any of the learned professions, after a person has once been admitted or licensed, by the exercise of the police power, which in common language I take to mean "self preservation."

Fourth.—That the state has also the right and power to determine whether a school or college is reputable, and whether its graduates are qualified to present themselves before the Board of Registration and Examination for a license.

Fifth.—That it is not an infringement of personal rights, or contrary to the constitution, to demand that a person desirous of commencing the practice of dentistry in this state, shall show by an examination, a certain

prescribed degree of skill and learning—that the public may confidently rely upon securing skilful treatment.

Sixth.—That the legislature may, if it deems necessary for the welfare or preservation of the public, change these requirements as to new applicants for a license.

Seventh.—The argument that because a person has been admitted to practice in one state, he has a constitutional right to practice in another state, because the Federal Constitution declares that the "Citizens of each state shall be entitled to all the privileges and immunities of citizens in the several states," cannot in any sense mean that a citizen of another state can bring to this state the right and privilege of the state he removes from, but only means that when he becomes a resident and citizen of this state, he has by this act, become possessed of all the rights, privileges and immunities of any other citizen of this state.

Eighth.—That each state has, by this legislative or police power, the right to establish its own procedure, and to prescribe its own qualifications, and that a license or diploma granted by another state, or by a chartered college, has no force or virtue except so far as the laws of this state shall recognize. It follows then, that our board has a great responsibility in interpreting the aim and scope of our state dental laws, and as each state can make its own laws, regulating the practice of dentistry, it would be in order for our own board to unite heartily with the several boards of the different states to establish uniform examinations, and to demand a preliminary educational standard, which shall be the same in all the states. This can only be done by mutual concessions, and hearty co-operation. As New Jersey has no dental schools within its borders, and the interpretation of the law must be largely the duty of our Commission, it would seem that considerable latitude must be allowed, or else New Jersey must depend upon the three dental schools of New York for its supply of dental practitioners, because at present New York State is the only state having the same high preliminary requirement.

The only course is either to lower the New Jersey standard, which would be a step in the wrong direction, or else elevate the standard of other states. The only way by which New Jersey can hope to influence a higher standard in other states is by continuing its membership in the National Association of Dental Examiners, and exerting an influence among those examiners to the end that the New Jersey standard may be reached by other communities. Their claim that because their standard is high, they are obliged to sever their connection with the National Association, is untenable. The National Association has no legal existence in the State of New Jersey, and a membership by the New Jersey

Examiners in it, is not, in any sense of the word, a legal or statutory connection, but merely a voluntary association and affiliation for the purpose of furthering the work which they are legally required to do in their own state. They could not possibly have any legal control over educational matters, in other states, and consequently their connection with the National Association is rather in the nature of voluntary missionary work.

The New Jersey Commissioners are members of the National Association as individuals, and not as a corporate body, and no board of examiners carries with it into the National Association any state authority or any state obligation; but only a moral obligation of its Commissioners to voluntarily associate with examiners from other states with the view of bringing their standard up to that of New Jersey.

It would seem, then, a necessary conclusion, that the interests of the whole dental profession would be enhanced by a continuance of the membership of our board in the National Association, and that the dentists of New Jersey would profit in many ways by continuing such a relation with our professional brethren from all parts of our country.

# A Quarter of a Century of Official Life in the New Jersey State Dental Society.

By Charles A. Meeker, D.D.S., Newark, N. J.

Read before the New Jersey State Dental Society, July, 1900.

About the 20th of October, 1870, there was sent to the dentists in whose employment I was, a circular letter inviting the entire dental profession of the State of New Jersey to go to Trenton on the 25th of that month, and help in the formation of a State society. I was in sympathy with the movement and made a resolve when I commenced to practice for myself I would make an effort to become a member. I felt then the need of more knowledge on dental matters, my acquaintance with members of the profession was limited and the secrets of the laboratory were divulged to only the favored few.

In just eight months from that time. July 11th, 1871, when I had but recently opened my own office, 1871. a meeting of the New Jersey State Dental Society was called for in the Conservatory of Music on Bank street, Newark. I said to myself, "This is my chance," and not without somewhat nervous dread, I presented myself on the day called for, at the place of meeting, about one hour before any one but the janitor put in an appearance. went out, returned again, and by a lucky chance, met in the hall that most benign and fatherly gentleman, the late Dr. Hayhurst, and stated my desires to him. He was, as I afterwards found out, the presiding officer. The treatment he accorded me was most kind; he accepted my name and credentials, together with the important \$3.00 cash, and before the day was over I was a full fledged member of the New Jersey State Dental Society, an occurrence which I have never yet had occasion to regret, and firmly believe that I never will. Then I made the acquaintance of Dr. Stockton, who was Vice-President, Dr. Geo. C. Brown, J. C. Robbins, Dr. W. Pinney, E. O. Peck, of Morristown, and Cyrus W. Pierson, who were elected with me at that time.

The subjects under discussion at that meeting were the Straight's flexible edge, and celluloid, both of which were just coming into notice, and they were severally and absolutely condemned. The exhibit that both pleased and instructed me most was the first exhibition of the Morrison dental engine (an awfully crude piece of mechanism looking at it now) and the use of rubber dams in a clinic performed by Drs. Delange and Hawks in gold filling. The exhibition of these two adjuncts of dentistry amply repaid me for joining the society.

The third meeting was called at the U.S. Hotel, Long Branch, July oth, 1872. Then I went and re-1872. newed my acquaintance with Drs. Hayhurst, Robbins, Stockton, Jenks, Brown and Cosad. Several new members were elected, notably Drs. McNaughton, Barlow and Hubbard, and a committee was appointed to procure from the legislature a dental law and the printing of a constitution and by-laws was provided for. This was but a sorry looking pamphlet, and I herewith exhibit a copy of it for your inspection. Dr. Pinney gave a clinic; no paper was read, but plenty of subjects pertaining to dentistry were discussed. Just to see how the subjects compare with the unsolved problems of today, I mention them, "The Use and Abuse of the Mallet," "Is It Possible to Bleach a Tooth After Discoloration?" "The Relative Merits of the Various Preparations of Gold" and "The Use of Phosphate of Lime as a Medicine." One of these questions has been positively solved, viz., bleaching teeth.

Branch, my acquaintance was further renewed with the older members and Drs. Adelberg, Clarke and Beesley were elected to membership. The committee appointed the previous year to obtain a law regulating dentistry, reported success, and this necessitated the appointment of a committee to draft a new constitution and by-laws. By this time our fame had somewhat spread, and Long Branch being a respectable summer watering place, we had as visitors Drs. Jack, of Philadelphia, and Abbott & Lord, of New York, and the exhibition of an electric automatic mallet by S. S. White and clinics in gold filling, together with the usual discussions, made a very full and busy day of it. I felt that I had learned very much by coming to this meeting, as I had met the great men of New York and of Philadelphia.

On July 14th, 1874, the annual meeting was held at Mount Holly, the hottest place in New Jersey, and we felt that we had grown to be a grand society. We had three papers read by Drs. Hayhurst, Beesley and Pinkham; visitors from New York and Philadelphia; an exhibition of a water motor and seven new members were elected, one being Dr. Welch.

The Pennsylvania State Society sent us a friendly greeting as an acknowledgment that we had become a factor in the dental world.

In 1875 at Long Branch we elected seven new members. Dr. Brown, Sr., the President, addressed the meeting, and spoke of amalgam, the beauties of celluloid—what a wonderful material it had grown to be—and the satisfactory working of the new dental law. Dr. Stockton read an essay on dental education and, wonderful to relate, Dr. Perrine, of New York, spoke of his remarkable galvano cautery battery and how he applied it for obtunding sensitive dentine. No one thought of saying "cataphoresis" then! As I never heard of the machine afterwards, it must have gone the way of the woodbine. About one hour was taken by Dr. De Lange in proving the value of celluloid, and the terrible effects of wearing rubber plates. He said that in vulcanizing, minute particles of mercury were set free and patients salivated. At this session at the end thereof your narrator commenced his secretaryship in the society.

Our next session, at Atlantic City, in 1876, I felt
was the turning point in the progress of our society.
Dr. Atkinson came. There was only one Atkinson,
and he was always ten years ahead of the rest of the profession. We
made a friend of him, and after that, until his death, he never missed one

of our meetings. We younger men were afraid of him in the matter of modesty in taking the floor, but wherever he was, he infused new life and energy and helped us wonderfully. Besides Atkinson we had with us Dr. Barker (now dead), dean of the Pennsylvania College; Drs. Marshal Webb, Bonwill and Townsend. Verily a bright galaxy of dentists! Dr. Hayhurst then read his first installment of the history of dentistry that was continued from year to year until completed. Many good papers and some poor ones were read at this meeting which ended figuratively in a blaze of glory.

The next year, 1877, the society went back to Long Branch again. This time from Dr. Atkinson we had a specially good paper on "Tumors and Abscesses" that will even bear reading again at this date, twenty-three years since it was read; we likewise had a paper by Dr. C. A. Marvin. Our membership was larger and visiting dentists came to hear our star, "Atkinson."

Dr. Hayhurst had the power of State prosecutor conferred on him by the society, and prominent members solicited the honor of representing our society in the American, New York and Pennsylvania societies.

In 1878 we were again in the same place, Long Branch, and we had another star performer, viz., Stephen Pearl Andrews, of New York. I never understood anything he said, nor could I find any other dentist who knew any more about it than I did, but it must have been all right because the New York papers all gave full and extended report of Stephen Pearl Andrews, and the dental part of the session had about six lines! I was satisfied anyway; it let the country know there was a New Jersey Dental Society. At this meeting Dr. Hayhurst concluded his History of Dentistry—an interesting series of papers to read even at this day. The discussion at this session and the accession of new members were gratifying memories when adjournment time came.

The next year, July, 1879, we were again at Long Branch. Eight papers were read, a notable one being that of Dr. Scarborough, known as a Thompsonian or eclectic, on "The Use and Abuse of Mercury." There was a hot fighting argument between him and Atkinson; while Scarborough was no match in ready and eloquent flow of language, he valiantly battled for his theories and stood his ground well. Long Branch was an ideal place that July, and I believe the general show of hospitality to the many visiting dentists, for which we are still famed, helped us then and always will give us an enviable name in the dental world.

The meetings of 1880, 1881 and 1882 were held at the same place, but were not distinguished by any 1880, '81, '82, very remarkable papers or by much growth of the society. There was, however, an unfortunate development of cliques for the passage of some impracticable ideas. The registration of dentists received attention, and a committee was appointed to procure the passage by the legislature of a law providing for the degree of Master of Dental Surgery, copied after the New York law. An old check list shows that the members were pretty evenly divided. I think the end of that fight showed a vote of seventeen to twenty-one. It was then the older members of the present day laid the foundation of their present ability in parliamentary usages. That there was some fun going on, is illustrated by a humorous incident which comes to my memory. You have all heard of Dr. Welch, of Vineland, a dentist who combined with his practice the manufacturing of non-fermented grape juice. He expressed a case of his vinous product to Long Branch, presumably for distribution among the well known and influential members of the profession, as an appropriate method of advertising; some of the members heard the box was at the depot and had it carried to one of the suites of rooms where about a dozen of them were quartered. It happened that Dr. Dippolt, of Trenton, who came late and found rooms scarce, was given an apartment in the suite of this unruly crowd, and the case was sent to his room; he was asleep and upon being awakened received it. But a short period elapsed before the dozen congenial spirits rapped at his door, which he refused to open. Going around to the end of the hall the entire party filed in the room. There was no hammer to open the box, so in lieu thereof, they took Dippolt's boot, one of the old-fashioned variety, and notwithstanding his protests at its use, it was employed with sad results and everyone had a drink save Dr. Dippolt, who indignantly refused; but they must have poured it into his boots, as he was going around the next morning with a pair of felt slippers on, the only kind of footgear they happened to have in stock at Long Branch, and you know they do not look very pretty among well dressed people! The wine was equally distributed to outside members, save two bottles which were placed in Dippolt's bed. and Dr. Welch quietly informed where they were, thus making the staid Dr. Dippolt a particeps criminis. The doctor did not attend our meetings after this incident and dropped out of the society, while those who drank the wine had all they desired of laxative medicine for the balance of the session.

The next year, 1883, we were at the Coleman House, Asbury Park. Dr. Levy and myself made the contract with Mrs. Coleman, who, with her two daughters, certainly knew how to run a hotel. They were not imbued with the strict (religious or prohibition as you like it) tendencies extant at Asbury Park, and the society, while there, ran the house.

This meeting was a turning point for the society. The hotel had a large amusement hall, and we made a bid for what I have always believed is a large element in successful dental meetings, viz., exhibits.

We had seven essays, a clinic by Dr. C. W. F. Bodecker, a continuous gum furnace, and a hydraulic swaging machine through Dr. Timme, Dr. Carl Buttner's (of New York) crown, Dr. Sleg, of Reading, now deceased, and others, besides a goodly array of dental goods.

The next year, 1884, saw us at the same place with nine papers by our own members and one by a star, the lamented Carl Heitzman, of New York. We also had nine clinics, and a list of exhibits that was an increase over the former year. Every one enjoyed himself hugely at this house, and the best of fellowship prevailed towards our visiting dentists. Probably the outside guests quartering there may not have felt so kindly towards us when two a. m. a procession marched through the halls, comprised of staid, elderly and gray haired men in robes de nuit (many of them now dead and gone) who called from door to door and compelled the occupants to get up and follow with the procession, with Mrs. Coleman looking indulgently on and letting them have their fun. Imagine us doing that over at the Columbia!

The next four years showed a continual improvement in our meetings, clinics and exhibits. 1885 to 1896. In 1885 we gave a swell ball with the governor as the guest of honor. In 1886 we gave a memorable dinner to Dr. Wm. Herbst, of Bremen. In 1889 we issued our first programme in book form and felt somewhat puffed up about it. We had nine papers, one a notable discussion between Dr. Xavier Sudduth, the writer of the paper, and Dr. Carl Heitzman. We had sixteen clinics and twenty-one exhibits. From 1885 to 1890, when we passed our new dental law, there occurred a gradual process of evolution towards higher attainments. In 1891, after a great deal of hard labor, we had a joint meeting of New Jersey and Pennsylvania, with the best men of the country in attendance. In 1892 we returned the compliment with Pennsylvania at Cresson Springs. The programme issued for that meeting was the largest and most complete directory of any dental programme before issued, it having thirty-eight printed pages. The 1893 and 1894 meetings were prosperous for us, and in 1895 our silver anniversary of twenty-five years could only be celebrated in a place large enough to hold the crowds and exhibits, so we took the Auditorium at Asbury Park, and started upwards on a higher grade.

With the meeting of 1897 came a desire among many members to try a change to Atlantic City, and I think that most of the members will coincide in the thought that the change was not a prudent one; yet it was a necessary experience. At this meeting we had five regular papers and on one subject, the treatment of root canals, seventeen five-minute papers. In fact we had so many papers that many had to be read by title. The exhibits were large and satisfactory, but the room was crowded, and the exhibitors showed their wares to great disadvantage, while the hotel proprietors made unusual pecuniary demands on members and guests.

1898 and 1899 found us again at the Auditorium,
Asbury Park, with larger meetings, more extensive
exhibits, clinics and papers than ever before, and
programmes that cannot be matched in this or any other country in thoroughness of detail and beauty of topography.

This year's meeting is before you, and is the result of the work of Dr. Riley. The papers you judge, the clinics you learn from, and the exhibits, large in number and more diverse in extent than ever before shown, number thirty-six in all. It will soon be a memory of the past, but will have accomplished its good work which will live afterwards.

In the twenty-five years I have been an officer I have watched with pride the society grow to the high position it today occupies in the dental world. My deductions may be incorrect, but permit me to mention a few points that I feel have helped us. The most powerful elements are the exhibits and clinics. Very many members of the profession do not take the journals and do not attend dental meetings where papers are read, but if you will show them how an operation is performed, and the new instrument or material is exhibited, they will put themselves out to come, and in time, by a process of evolution, they are educated to a higher plane and may be candidates for membership. Another element is the education of our members to do work and the democracy of our society. In 1883, Dr. J. C. Clarke promulgated the unwritten law of our society that each and every member stands in the line of advancement; the member goes from the minor committees to the vice-presidency, and nothing stops him from taking the highest office in the gift

of the society provided he has kept on working. The position is open to all.

I am thankful for the many friends I have made in my time, and feel keenly the demise of those friends who have gone beyond: there are but three members now living who were in the society when I joined—Drs. Stockton, Chew and Peck. I am thankful for the many courtesies extended me. It comes to few men to have a quarter of a century of uninterrupted service, and never miss a meeting, and I bespeak for my successor, the good wishes and good will of the society, and the same kind and considerate treatment which I have received at the hands of its members.

## The Eyes and Teeth—Some Concomitant Pathological Changes.

By EUGENE UNDERHILL, M.D.

Read before the New Jersey State Dental Society, July, 1900.

Since the announcement of the subject of this paper by your society I have met a number of ophthalmologists who have raised the question as to what possible pathological changes affecting the eyes, could be superinduced or in any way modified by dental changes. I also met a large number of dentists bristling with interrogation points of the same character from the dental standpoint.

When asked to write the paper I readily consented, supposing that there was a great deal of literature upon the subject and that the best I could do would be to classify some of the more important points and put them in shape for some immediate and practical use. But in all dental literature I scarcely found more than a reference to the subject, and in ophthalmological literature even less reference.

We have extensive and pathological studies relating to general conditions of both the eyes and teeth, but in their relationship to each other scarcely any attempt at systematic investigation has been made. It is practically an unexplored, if not a new field. We have had pretty clearly demonstrated the philosophy of the eyes as related to the development of character, involving both mental and moral qualities. They have long been recognized as presenting suggestive, if not final, conclusions in relation to positive diagnosis of certain gastric, renal, cardiac, and neurotic lesions, and we are not without interesting deductions as a result of careful observation regarding the growth and form of dental

structures, and their significance in certain conditions relating to predisposition to disease, habits and temperament.

A natural taste for investigating associated phenomena and a habit of recording the observations made during quite a large clinical experience, enables me to present a series of facts which will show the reasonableness of our subject, and suggest a line of investigation and study that may lead to mutual co-operation and helpfulness on the part of dentist and ophthalmologist, and produce results on behalf of the patient that could not otherwise be secured.

The time has arrived, if it has not actually passed, when as oculist or dental surgeon we can limit ourselves in our observation or study to the optic foramen, or the buccal cavity. We are called upon to view not an eye or a tooth, but a whole man. This is pre-eminently true of the oculist, and the proposition will daily gather strength and force as related to dental surgery. The oculist must be a physician. In my judgment, the dental surgeon, by natural fitness and education, ought also to be a physician with the same liberty and legal rights as accorded to any other specialist.

When we have pursued this study to its final analysis and perfected ourselves in observing the concomitant pathological changes that actually exist, we shall be able to diagnose pretty clearly many dental changes by the external appearance of the organs of vision; on the other hand, we may be aided and directed in our ophthalmic studies by recognizing the presence and progress of dental changes. Certain conditions will suggest at once corresponding and related changes and there will be a personal satisfaction in being able to observe them, and if it should seem necessary or expedient, to mention them to the patient, you will often seem like a wizard or prophet.

Communication
Between Eyes and
Oral Cavity.

It seems hardly necessary to point out the intimate relationship existing between the structures involved in this study; but since the interdependence of pathological changes are called in question, it may not be out of place to call to mind a few of the chan-

nels of inter-communication. If we wish to establish the fact of reflex communication, we have simply to mention the trigeminous nerve; having its origin in the floor of the fourth ventricle and distributed to the skin and structures of the face, tongue and teeth. We have the three great branches of the same nerve, the ophthalmic, the superior and inferior maxillary with their anastomosing branches forming a rich net work of reflex communication which is scarcely excelled in any other part of the nervous organization.

We have direct communication by way of the mucous membrane and the circulatory system, and possibly by means of the intercellular substance, but it is not the purpose of this paper to demonstrate how concomitant pathological changes occur, but to emphasize their existence and offer some suggestions regarding their recognition and significance.

Let it be understood that the words eyes and teeth as used in this paper are general terms and refer to all the structures immediately concerned in modifying the condition or use of these organs. The ophthal-mologist has vastly more to consider than the mere adjustment of glasses; the dentist is called upon to exercise his skill far beyond his ability to fill cavities. They will examine neighboring tissues. At times they will analyze the secretions; they will consider every circumstance that may suggest a reason for a departure from the normal, or discover a means of arresting disease.

Associated Lesions
of
Eyes and Mouth.

In abscesses of the cornea and in phlyctenular conjunctivitis and keratitis the pathological changes observed in the mouth are practically the same. Abscess of the cornea appears as a yellowish, slightly elevated, round or crescent shaped opacity near

the center of the cornea, and is surrounded with a light grayish zone. The whole cornea frequently becomes dull and lusterless. Pain and photophobia always present.

Phlyctenular conjunctivitis is marked by the formation of one or more ulcers upon the conjunctiva of a grayish red appearance. They are attended with signs of congestion, pain, photophobia, swelling and redness of lids and a muco-purulent discharge.

In phlyctenular keratitis we have one or more small vesicles forming on the margin of the conjunctiva and extending upon the cornea usually in the shape of a crescent. There is acute pain, lachrymation, and intense photophobia.

This patient is generally a child, but it may be an adult.

The patient appears to be poorly nourished, carries the head well forward while walking, or bent down while sitting. The skin is rough and dry, but is unusually white, and at a little distance has a soft, pasty appearance. The face may appear rather full, but the body is emaciated. From many of these patients you may frequently get a history of epileptiform spasms.

Now look into the mouth, but you may know the condition and declare it with certainty without looking. You will find localized apthous patches, inner margins of the lip sore, teeth loose and very sensitive; a drop of cold water applied to the base of a tooth causes pain; simply

touching with an instrument, or a draught of cool air may do the same. The gums are swollen, painful and bleed easily. Dental caries will probably be found well advanced, especially in the lower molars, and pressure upon these teeth causes pain which is referred to the ears.

In the mind of the dental therapeutist the apthous condition referred to is generally associated with gastric disturbances, and no doubt there is a casual relationship, but it is a result and not a cause. The sometime regulation treatment in the administration of laxatives and the alternate exhibition of alkalies and hydrochloric acid may give you something to think about, and divert the mind of the patient for a time, but in the end if you have these associated conditions it will not do any good.

But intelligent co-operation on the part of both oculist and dentist will produce results that will make the "Eyes Examined Free" specialist and the "Dental Parlor" magnate turn green with envy.

Nictitation or clonic spasm of the orbicularis muscle and frequent appearance of hordeoli, or styes, may be, and generally are, due to errors of refraction; but in some cases the most skilful adjustment of lenses fails to remove the difficulty.

Let us suppose that all treatment directed to the eyes fails, as occasionally happens; here the family physician may be thought of for the institution of measures looking to the correction of digestive disturbances—and such disturbances probably exist, but they are usually of the kind that are associated with dental changes, and the dentist ought to be better equipped for dealing with such a case, and to him the patient should be sent. The ears are generally involved by extension, the gums are sore, the mucous membranes are all dry and have a dirty appearance. Now let the dentist proceed to clean house. Remove the dirt from the teeth, plug up the cavities, replace any dentures that are missing and exhibit an appropriate mouth wash, and tell the patient to call early and often.

Glaucoma is probably one of the greatest calamities that can overtake an individual, since it threatens total loss of vision. It is an increase in the intraocular tension due to an excess of fluids in the eye. The only hope for the patient in this disease is its early recognition. The very first symptom in glaucoma is pain in the upper molars, and especially pain on pressure. This pain may or may not extend to the eye or the temporal region. When such a case comes under the observation of the dentist, and he has excluded all possible causes emanating from the teeth or surrounding parts, he will do that patient the greatest possible service by referring him to a competent oculist, and at the same time he will gain for himself a reputation for keen insight and practical investigation.

In inflammatory glaucoma pain that is caused by pressure on the upper molars generally extends over the face to the eye and ear.

There is a condition simulating glaucoma which produces a temporary dimness of vision, which is frequently caused by advanced pulp degeneration and pericementitis.

Neuralgia of the eyeball, characterized by pain in the eyeball and forehead, lachrymation and photophobia is frequently cured by the removal of a molar stump from the upper jaw.

Ex opthalmos, characterized by protrusion of the eyeballs, may be due to circulatory disturbance, myopia and orbital tumour, or it may be a symptom of ex ophthalmic goitre, but when there is a protrusion of one eye alone, a possible dental disturbance should not be overlooked. In acute cases characterized by intense pain in the orbit, roaring in the ears and general congestion of the affected eye, some old stump of a carious tooth is frequently at the bottom of the whole trouble.

Mydriasis, characterized by an abnormal dilatation of the pupil, is frequently caused by sordes and neglected carious teeth. The accumulation of debris producing a condition affecting the eyes in a manner simulating ptomain poisoning. It is, however, worthy of note that mydriasis from this cause is usually unilateral. As mydriasis is almost always present in glaucoma, the importance of referring this patient to an oculist should not be overlooked.

Errors of refraction and abnormal ocular conditions are frequently causes of stomatitis, and should not be overlooked in obstinate cases. If vomiting supervenes, or the secretions of the mouth become acrid and excoriating, eye-strain is probably at the bottom of the whole trouble.

It is well known that headaches are very frequently due to troubles affecting the eyes, and it is probably this symptom which brings the majority of patients to the office of the ophthalmologist. Formerly the oculist considered headaches as all belonging to him. He seemed to think that they were all his by a sort of divine right, until the gynaecologist appeared and demanded a division.

Perhaps there ought to be another partition and the dentist allowed to have his particular headache. Whether he has ever claimed it, or even thought of the possibility of headaches being caused by dental disturbances, they certainly do occur in that way. In neuralgic headache, associated with lumbago (the rheumatic diathesis), at some point of the dental system will be found a tender area which, on percussion, will be followed by more or less pain in the eyes and temples and a possible involvement of one or both ears. It may be due to caries or exostosis, or both. It is worthy of note that in almost all headaches of dental origin in which the

eyes are involved there is scarcely ever a toothache or any other symptom directly associated with the dental system.

Effects of Syphilis
Upon the
Eves and Teeth.

There are, perhaps, no pathological changes affecting the eyes and teeth that are so extensive and destructive in their processes as those associated with gonorrhea and syphilis, especially syphilis; and this is not surprising, but that the associated phe-

nomena should be so marked, and at the same time so little understood, is a subject of wonder and amazement. As between the ophthalmologist and dentist, the ophthalmologist, perhaps, has the best of it by reason of an accumulation of literature upon the subject and the necessity of frequent differential diagnoses. But it would be supposed that the dentist, coming in frequent contact with mucous surfaces, loaded with toxic elements and presenting destructive changes involving almost the entire dental system, would be a past master in the recognition of such conditions. Perhaps he is, but it is safe to say that he did not get his information from dental literature. It is doubtful if he could find a clear, brief, pointed, practical statement of the essential facts in any literature; yet the manifestations are well defined, easily understood, and present themselves in a manner clear as sunlight.

Syphilis may show itself in the eyes in the form of syphilitic iritis, ocular paralysis, blepharitis, retinitis and optic neuritis. There are many other eye manifestations of this disease, but this list will serve our purpose. The diagnosis of these lesions requires considerable experience in the use of the ophthalmoscope. For the purposes of this study, however, it is sufficient to point out certain symptoms that may be readily recognized in connection with dental changes.

There are three stages in syphilis; the primary, secondary, and tertiary. All manifestations of this disease in and about the mouth are highly infectious.

The eye symptoms may be very marked, or they may be slight and require close observation, and some questioning to establish their presence. You may get a history of diplopia, or double vision, sudden loss of sight while reading, pressure and stinging in the eyes, and inflammation. You may observe pustules on the cornea, but there is no photophobia, or pain. There may be oedema of the eyelids and ptosis, or drooping of the upper eyelid. The margins of the eyelids often appear red and inflamed, sometimes all the structures of the eye appear congested, but there is a suggestive absence of pain. Anæsthesia, or dulness of sensation in the skin of the face, is frequently observed. Instead of the bluish appearance often observed about the eyes in exhaustive disease, you may note a

yellowness, which is nearly as well defined above the eye as beneath it; and when this symptom is present, the cheeks usually appear red, due to sluggish capillary circulation. Caries frequently develops in the mastoid process and malar bones; even when the disease is well treated and all ordinary symptoms are well controlled pressure in the vicinity of these bones will disclose a tenderness, if not an actual pain. Pain behind the eyeball is suggestive of caries of the orbit.

The symptoms mentioned may be observed any time after the initial lesion, but especially during the second stage of the disease.

In the beginning of the second stage the pupils are generally contracted. Late in the second stage the pupils are generally dilated, and appear unusually bright. It is well known that syphilis has a great affinity for glandular structures. Even during the initial lesion, a slight tenderness may be noted in the sub-maxillary glands; a tenderness which increases very slowly until a sore throat develops; and that sore throat is almost always a one-sided sore throat.

Now look in the mouth. The mucous membranes appear dark red and raw, sometimes copper colored. They look very tender, and as if they would bleed easily, but a puncture from a sharp pointed probe does not bring any blood, and the patient does not complain of pain. The uvula is always involved. The gums are red and swollen, and have a tendency to stand away from the teeth. Later the gums are white and swollen; the whiteness being due to the death of tissue. The teeth have a marked tendency to become yellow and loose, and are very sensitive to anything cold or warm. Some of the teeth may fall out, due possibly to caries of one or both maxillary bones, but more likely to pyorrhea alveolaris.

You have been looking for a cause of pyorrhea. If it is true, as one of your observers has declared, that the peridental membrane is supplied with a glandular system, is it not reasonable to suppose that syphilis, from its well known affinity for glandular structures, is a very fruitful cause of pyorrhea?

In gonorrhea some interesting associated changes may be noted, especially those occurring during an active gonorrhea opthalmia. The eyelids are swollen and constricted, there is great pain, profuse lachrymation, photophobia and a thick yellow discharge. All the mucous membranes of the mouth are hyperæmic. The follicles of the pharynx are distended and when ruptured by pressure, a thick, yellow mucous may be seen. In the ulcerated condition of the follicles they are large and irregular in size. This condition is not met with in syphilis. In gonorrhea the mucous membranes appear distended or thickened, due to in-

flammatory processes. In syphilis the mucous membranes appear shrunken and diminished due to destruction of tissue. In the gonorrhoeal condition the pains are superficial and acute. In syphilis they are deep seated.

Simple catarrhal stomatitis and follicular stomatitis may present changes in the mouth similar to those observed in gonorrhea, but in catarrhal stomatitis the characteristic eye involvement is not likely to be observed, and in follicular stomatitis the resulting ulcers are small and uniform in size.

The cause of the appearances noted in the mouth may be a manifestation of a general systemic disturbance, or it may be the result of a mild secondary infection.

There are many other pathological changes of common interest to the ophthalmologist and dentist, but perhaps enough has been said to show how these great specialties in the science of medicine may be mutually interesting and helpful.





## New Jersey State Dental Society.

Chirtieth Annual Session, Asbury Park, N. J., July 18, 19, 20, 1900.

#### Evening Session.

President Truex called the meeting to order.

The President announced the following committee upon the changing of the by-laws regarding delegates from the Southern and Central Societies of New Jersey to this Society: Drs. Irwin, Stockton and Sanger.

The Committee on Membership reported the following applications: John C. Graft, Newark, N. J.; Sponsors, Drs. Bradfield and Osmun; Thomas W. Dobbins, Newark, N. J.; Sponsors, Drs. Stockton and G. C. Brown; W. D. Rood, Morristown, N. J.; Sponsors, Drs. E. L. Peck and Sharp. On motion the above applications took the usual course.

The Committee on Membership reporting on all the applications the Society proceeded to an election and the following persons were unanimously elected to membership: Dr. Mary A. Morrison, Salem, N. J.; Dr. Joseph B. Sharp, Bridgeton, N. J.; Dr. Edward H. Webb, Jersey City, N. J.; Dr. John C. Graft, Newark, N. J.; Dr. Thomas W. Dobbins, Newark, N. J.; Dr. W. D. Rood, Morristown, N. J.

The Committee on the Changing of By-laws reported as follows:

"Your Committee respectfully recommend that Section 2 of the Constitution and By-laws read as follows:

"All local dental societies in this state whose constitution and bylaws are in accord with the code of ethics of this Society, shall be entitled to representation in this Society in the proportion of one delegate for every five active members of said local society and said delegate shall be accorded all the privileges of active membership in this Society upon payment of regular member's dues." On motion the above report was received and laid over until the next session.

Dr. J. Allen Osmun then read a paper entitled, "Dental Jurisprudence in its Relation to State Examining Boards, the Profession and the Laity."

#### Discussion of Dr. Osmun's Paper.

Allow me first to thank the Essay Committee, Dr. G. Carleton Brown. who invited me to open the discussion on this most carefully prepared and admirable paper of your essayist. It needs no pointer from me to show you how carefully and conscientiously Dr. Osmun has studied his subject, and how correct in the main his views are. I congratulate Dr. Osmun on his effort and the society upon this addition to its literature; I also congratulate myself upon having had a copy of the paper submitted to me by Dr. Osmun in time for me to consider the questions raised and prepare a response more carefully than could be done offhand after simply hearing the paper read.

The body of the paper is taken up with a *resumé* of cases and decisions for the purpose of proving the constitutionality of protective laws and the rights and powers of examining boards. The cases quoted are well known to those who have made a study of this subject; they are not open to discussion, being statements of fact. His deductions are clear, concise and in general unassailable, with one exception. But when your essayist leaves the proven and assumes the role of a chief justice, I must beg to differ from him.

Your essayist was I believe a member of the Legislative Committee, that drafted the bill of 1898. It is therefore with surprise that I notice the stand he takes on the question of preliminary education. The clause which he attacks is the keynote of our present preliminary standard, and it is most disappointing to hear a member of the Committee who framed the law, and certainly understood that graduation from a high school with a four years' course was meant—now claim that the clause, "a preliminary education equal to that furnished by the common schools of this state" means "district schools," and going still further says, "In my opinion the high school is not a part of our common school system, but is rather an addition to it." and to emphasize his point continues, "The high school, even in the school districts where it exists is not open to all, but only to those who have shown a certain degree of proficiency in the common schools."

I can well imagine the consternation that will be produced in the State Educational Department at Trenton, when they are informed of this new opinion, which will upset the whole educational department of the state, and require a complete re-organization of the department. As the high schools have for long been considered the most important and crowning glory of the common school system of our state, so much so that when after the passage of the law of 1898, the State Dental Examining Board laid this very clause before the Superintendent of Public Instruction for his interpretation, he said without a moment's hesitation, "Why, that means graduation from a high school, with a full four years course." This was what is was intended to mean, and the prompt interpretation given by the highest educational authority in the state was satisfactory. It was on this ground that the New Jersey Board were enabled to arrange for an interchange of license with New York State, and now your essayist would pull down the work of years and place our state, which has been a leader in this fight for a high preliminary standard, on probably the lowest round of the educational ladder.

I cannot believe that Dr. Osmun fully realizes the import of his words, or the dangers inculcated by them; he has formerly professed to be in favor of a high standard, but if this is so, why does he attempt to undermine one of the most important parts of our law, the preliminary standard? And, again, why does he bring forward the supposedly settled question of the non-necessity of a college education? By his quotations and deductions from the Dent case, you are led to believe that the Supreme Court has decided that a diploma is not a necessity, simply passing a state board, without previous qualification being all that is necessary. If this were so it would throw us back many years and all our work would have to be begun over. In this connection I cannot but quote from our records of twenty-two years ago. I remember the incident well. I had recently graduated and been elected a member of this Society. We had our meeting in a little church in Long Branch. Dr. Meeker was President and Dr. Stockton, Secretary. Dr. Palmer read a paper entitled, "Our Mission," which was well discussed, Dr. Stockton making some extended remarks, among which occurred the following:

"We talk about dental education—that is the theme of today. The elevation of the dental profession is something for us to have near our hearts and I have wished sometimes—not that I would for one moment in any way reflect upon those professional brothers who have served with me upon the Examining Board of our Society, but I have wished sometimes that we had no Examining Board. What I mean by that is, that every young man who comes into the dental profession should be the graduate of a dental college; that they should not be permitted to enter our profession that we love so truly and that we are trying to elevate and make a learned and scientific body, without being thoroughly

educated and qualified. I would not have these young men come in, some of whom cannot spell a sentence across a sheet of foolscap correctly. I would not have them enter our profession. If they have not the means or the ambition to properly educate themselves and if they cannot come in with a creditable education, I would say to them there are other fields of usefulness; there are other callings in life in which you can get a livelihood; but the time has come when those who want us to recognize them as brothers and who desire to be fellow-workers in this grand cause of dentistry, in this great mission of saving teeth and saving men; the time has come when we want them to be educated so that when we extend to them the right hand of fellowship we may do so feeling that we are extending it to one who is worthy to receive it."

Dr. Osmun took this to himself and replied as follows:

"Dr. Stockton in his remarks stated that he regretted that we had an Examining Board; in other words, he would rather have the Examining Board done away with from the Dental Society; and he stated that if a young man had not the means and the ambition to go through a thorough dental course at a college he would better choose some other field of labor. Well, there is such a thing as natural ability. may have the natural ability to become a dentist and he may not have the means to acquire a thorough dental education by attending college. I was one of those young men. I believed that I was qualified to be a dentist, but I did not have the means to go through a dental college and pay the fees. So I studied hard by myself and with my preceptors. I passed the examination before the State Board successfully, I am now in practice and earning a livelihood for myself and family, and I do not think it becomes a man, because he has had advantages in early life to stand up and try to put down young men who are trying to get along simply because they have not the means to go through college and obtain a thorough dental education. I trust this Association will not abolish its Examining Board, but will permit any young man who has sufficient ability and who is willing to study hard and who fits himself to pass the examination to come in and stand on the same footing with those who have the means to pay for a college course from their wealthy parents."

This, gentlemen, was twenty-two years ago, and I had supposed we had progressed some in that time, but it seems not. I am sure, however, Dr. Stockton will stand by me on this his own platform, which I drank in with such eager ears at my first convention. No, Mr. President and fellow-members, do not ask us to go back even though the N. A. D. E. have fallen from grace, and lowered their flag, do not ask us to do the same. New York and New Jersey have by a mighty effort placed them-

selves upon a plane that the others must and will come to; we can help them up and will, but we cannot go down and push them up; as we are but two and they are many. Never has New Jersey shown an inclination to go back from her high ideal, and I do not believe she ever will.

This, Mr. President, would have concluded my remarks on Dr. Osmun's paper, but a short time ago I received the following letter from your essayist:

"My Dear Brown:—I have added the enclosed to my paper and thought you should have a copy so you can properly go for the 'old man.' Yours sincerely,—Osmun."

Enclosed were the last two pages of the paper, those referring to the connection of the New Jersey Board with the N. A. D. E. Dr. Osmun's information on this subject is so erroneous that it is a pity that the postscript which is always supposed to contain the real pith of the letter, should have been written; in fact it seems as if the postscript had been written first and the introduction or main paper afterwards, but mistakes will happen in the best regulated of families, and if Dr. Osmun will examine the constitution and by-laws of the N. A. D. E. he will find that there is no such thing as individual membership.

Article 3, of the constitution in that Association is as follows:

"This Association shall consist of such different state boards of dental examiners as may elect to join the National Association. They may be represented either by a delegate or delegates duly authorized, or by the whole board. Certificates from the proper officers of any board will be necessary to entitle such board to representation in this body."

Article 4 reads as follows:

"Each state board shall be entitled to ten votes. If at any meeting of this Association but one member of any board be present he shall cast the whole number. In case there is more than one member present the ten votes of the board shall be equally distributed among, and cast by, those members of such board who are present."

In one section of the paper Dr. Osmun spoke of the fact that we would have to depend on New York State for our practitioners. That is very misleading. The mere fact that New York State has a law similar to ours, of the same standard, does not preclude the students of the colleges of other states who have the requisite preliminary education, from coming up, and we have just as many students come before the New Jersey Board from Pennsylvania and Maryland and the West as we do from New York. That argument is absolutely worthless.

May I beg the indulgence of the Society to answer one point right now before it is forgotten?

Did I understand Dr. Brown to say that I claim

a diploma is not necessary, or that we should go back to the time when we did not have a diploma, which would enable the student to come up for examination. Do I understand that correctly?

Dr. Brown.

That was my deduction from the Dent case, which you quoted.

Dr. Osmun.

Either Dr. Brown or I, or both of us, look at things from different standpoints, for I assure you there was nothing under Heaven further from my ideas than that, and I have read that part of the paper over again carefully, and cannot see anything in the decision to justify that conclusion. If any of you had any such idea I wish to disabuse your minds of it, for I had no intention of putting any such thought in and I do not see how he got it.

**Dr. Brown.** From one of your conclusions.

I did not intend to make any such point as that.

Dr. Osmun. That was the subject I wished to speak on before any other discussion went on, because I thought

it was of sufficient importance to be corrected at once.

Mr. President and gentlemen, the paper seems Dr. C. S. Stockton. to be so fully complete that I thought almost any discussion of it would rather take from than add to, but as my mind goes back over the many years that I have been in practice, I cannot help but think of the difference regarding the qualifications of entering our profession, of former years, to what the law requires today, and therefore I would only refer to the first part of the doctor's paper where he quotes Dr. Sheppard as saying that the law of the state has done more towards the education and elevation of dentistry than anything else, and also to the last clause and postscript in regard to the dental examining board.

We all remember very well that forty odd years ago anyone could graduate from a blacksmith shop to a dental parlor, although at that time there were no dental parlors. I am sorry to say anybody could go to a preceptor or not, as he pleased, and when one thought himself qualified to practice dentistry he began to do so. It was not necessary that the student should have any certificate from the gentleman with whom he had studied. Today the qualifications are very different, because of the dental laws in the different states. The dental law of New Jersey coupled with the State Dental Society has done more to make dentistry what it is in New Jersey than anything and all things else combined, and I am very glad that the qualifications are as high as they are today and I am glad that Dr. Brown has quoted what I said

some twenty-two years ago. I would not lower in any degree what I said then. We cannot go back, we cannot lower the standard when the whole progress of the world, in education, in mechanics, in arts and in everything else that constitutes progress, is forward. The wheels are whirling round with such rapidity that no one can afford to take a backward step. The watchword of the day is "Progress" and a man must keep up with progress. If one wants to know, to quote the language of the celebrated gentleman, where he is at, he must for a moment jump off the car of progress and put down his peg for a time and observe the conditions that surround him, but we cannot afford to take a backward step. I am glad that we are in such an exalted position today and it seems that our standard is so high that our State Board has attempted to resign from the National Board of Examiners, on the ground that the standard of the National Board is not as high as ours. That is a splendid record for us to have, but it is not such a splendid record as I want our Board to continue to have and they cannot maintain that position if they withdraw from the National Association. The health of any of us may fail and there be reasons why we desire to go into some other state to practice and will we be aiding in accomplishing that if our Board withdraws from the National Association? No, the National body is the only means by which that desirable end can be accomplished. If it can be brought about that one who through family reasons or failure of health or any other cause may want to go into some other state to practice, can take a certificate from the Examining Board of the State of New Jersey and go into another state and the examining board say to him "Yes, doctor, come and welcome; hang out your shingle, we will protect you here, practice dentistry and make a living," then a great thing will have been accomplished. That is what we want our State Board to do through the National body and they cannot do that if they withdraw from it. It is said their standard is low and ours is high—then stay in that Board and bring the National Association up to where we stand, or higher still. (Loud applause.) You take a poor family from any of our crowded tenement blocks, put them into some of the better streets in a comfortable house and compel them to stay there and what is the result? Do they long to go back into the hovels in which they were? No; they like the place where they are too well; their children are clean, well shod, with faces washed and hair well combed, and they would not go back if they could. That will be the result when our Examining Board stays in the National body, Carleton, (addressing Dr. Brown) and makes it come up to the New Jersey standard. Then, too, in time we may be able to say to our brethren, "No matter how unfortunate you have been in New Jersey in health or otherwise, you

can take a certificate from your own state and practice dentistry anywhere throughout the length and breadth of this proud land and no one can say you nay." (Loud applause.)

I would like to rise to a point of privilege and **Dr. G. Carleton Brown.** state that Dr. Osmun has shown me that some of the deductions which I thought were his were simply brought in from quotations from the law of West Virginia.

Yes, what Dr. Brown refers to is this: "All persons who might be admitted to practice on an examination by the State Board of Health of West Virginia, should be permitted to practice there."

I would be the last man in this state who would take New Jersey back to anything like that; I was simply quoting from the act of West Virginia.

The lateness of the hour seems to preclude, even Dr. R. M. Sanger. if we assume the necessity therefor, a long discussion of this admirable paper. There are many things that might be said, side lights on this paper, which would be of interest to us as dentists. There is much to think of and some of the deductions of Dr. Osmun are startling, to say the least. The suggestion that gentlemen might be called upon to be re-examined, for instance, carries with it a species of nightmare which might disturb our slumbers tonight, if we really thought it was going to happen. (Laughter.)

There are difficulties in the way of reaching the goal of our ambition in regard to uniform legislation affecting the examination of dental students, which it is almost impossible to surmount. No law and no set of laws can be passed which will cover all cases and not work injustice to some, therefore uniform legislation will not enable us as reputable practitioners in one state to conform to the standard of another state whose laws are made by a different body of men. A uniform examination, the proposed remedy for this, has a peculiar inability in this wise: It is a well-known fact in the minds of all dental educators who have had occasion to examine class after class, that, in spite of themselves, they fall into grooves of questions, and in almost every college of any number of years duration there is tucked away in the lockers or vest pockets of the senior class copies of the average questions of every professor. Some men have gone so far as to publish quiz books, covering the salient questions of each chair. The same difficulty is now being met with in New York state by the Board of Regents. Under the law or the custom the questions of the Board of Regents of the state of New York are published, and any of you by sending a postal card to Albany can get those

questions in printed form. The result: Every senior student in the state of New York has obtained them—not the last set or the set before that only, but for a half a dozen years and he is studying up on those questions without regard to his Faculty lectures, anticipating the time when he shall go to Albany to get his degree. If this be true in the state of New York, how much more true would that be if there were a national set of questions which consequently would be spread broadcast over the country and in a little while that solution of the problem would be anything but a solution and we would have the average student coming up crammed for the examination and practically knowing but little else about his profession.

The position taken by the state of New Jersey is one that has brought it credit, not only in the United States but all over the world where New Jersey is known. The position has been so high that students from other states and colleges have crossed our borders with fear and trembling, though they were honor men in other states. This is well and the little state of New Jersev has stood as a leader. At the same time I agree in a measure with what Dr. Stockton has said, in that I feel we weaken our position when we withdraw from the National body who are trying to give the best solution they can to the question of a universal certificate. Departing from the paper a moment I agree with Dr. Stockton in the idea that it is better to stay in the game and use our influence as far as possible to bring them up to our standard than to say "I won't play because you don't play my way," and yet I believe on the other hand, that when our Board of Examiners tendered their resignation they did it feeling that they were out of place. But that resignation has not been accepted and perhaps they have frightened the National Association into coming up to their standard. We hope so.

But with regard to the essay of the evening I can only say for it words of praise, because it has given us instruction and perhaps will awaken us to new lines of legislative action—and everybody who has had anything to do with the legislature knows what a delightful thing it will be to go to Trenton on that errand! (Laughter.) I am sure that we have now a most excellent—not perfect—law. Such a thing as a perfect law is not possible for us to obtain and the influences at work in a place like Trenton are so individual, that it is impossible to get a perfect law. I believe, too, that it is not wise to expose the weak points of our law as the essayist's paper has. We are very apt to invite the public to believe that there is a way or a back door by which they can get in if they only try hard enough, perhaps by pressing at Trenton instead of at Asbury Park, and thereby getting a change of legislative enactment.

But I hope, Mr. Chairman, that this paper will arouse us not only

to a realization of the magnificent position of the state as a state, but also to a realization of the fact that we can and should do a very great deal of missionary work throughout these United States in bringing all the states up to our standards. (Applause.)

The President.

Would Dr. Patterson like to say something upon this paper; we would be very glad to hear from him.

Dr. Patterson, Kansas City. Mr. President, Ladies and Gentlemen: I have been extremely interested in this paper, and while the discussion is largely of local interest, there are one or two points that I should like to mention. One

is in regard to the fact that one state cannot make laws to control another state. That is a proposition which is well settled and at the same time I would remind Dr. Osmun that courts in one state cite cases in other states upon similar questions, and such citations are always taken into consideration, so, after all, while one state cannot make laws which will compel the residents of another state to their obedience, yet there are mutual concessions, especially in regard to dental laws. It is unfortunate that we cannot have uniformity and at the same time it is inadvisable to try and do that, because there will be always objections raised. But with mutual concessions and if the Boards will all endeavor to get to that point of view that is the way to reach uniformity and no objection will be raised by anyone to working in that direction.

Another question is in regard to the distinction which Dr. Osmun makes concerning common schools and high schools; it seems to me that Dr. Osmun is splitting hairs a little. My opinion is that the statement in regard to education received at the common schools means that which is common to all. Our high schools are common to all, and it certainly seems to me that phrase does embrace the high school. I do not think therefore the New Jersey men should be at all alarmed concerning Dr. Osmun's warning in that regard, for I do not think the point is well taken.

If I might be permitted to speak upon the local question in regard to State Board continuing its membership in the New York Association, it seems to me that while perhaps I might not have looked at all sides of the question, that is positively the thing to do. In order to join a society it is sometimes necessary to have certain qualifications, but if one has higher qualifications it does not prevent his becoming a member. You certainly can work with them and it is not necessary that the qualifications of the different state boards should all be the same if none of them be less than the minimum. By your working with them you will encourage them to come up to your standard. I trust the New Jersey Board will never resign from the National Association.

Dr. Barlow. Dr. Barlow. Dr. Barlow. Dr. Barlow. Dr. Barlow. Dr. Barlow. Design used in examinations. Now suppose the New Jersey Board went back into the National Association and that Association adopted a certain line of questions, would not the New Jersey Board be obliged to endorse those, and would not the trouble which Dr. Sanger speaks of as existing in the state of New York exist in the state of New Jersey?

Dr. Sanger. powers unto themselves as regards their standard and every one of the state boards voting to make a certain set of questions would not prevent any individual board from adding to that and raising the standard in their own state; it only prevents going below. Dr. Barlow misunderstood me. What I meant to say was that it was not a practical or feasible scheme to have a National Board of Examiners; not an Association of Examiners, but a National set of questions, if you like to put it in that way. That is to say there is no solution of this question possible through United States legislation covering all the states, making one examining board with a regular set of questions every four months to be published broadcast.

Dr. Dawbarn. I congratulate you upon the superb law which you have and I have reason to know of it, because I have spent part of my time until recently in preparing candidates for examination in the various states ever since there has been any dental law in any of the states of the Union. The dental law of New Jersey is no doubt the most rigid in the Union and that of the old Commonwealth of Massachusetts is about at the foot of the list; it requires only a practical examination; it does not require any examination in anatomy, physiology or chemistry.

Dr. Crouse.

Illinois does not require any now—except a ten dollar fee!

Dr. Dawbarn. of a re-examination being required from time to time: I cannot help feeling that such lies right in the line of progress, and it is by no means an impossibility that in the course of time we shall be subjected to more than one examination. Such is the practice in the Army and Navy and the Marine Hospital, where one has not only his entrance examination, but others on subsequent occasions. At the present time there is an attempt being made to have dentists appointed in the Army; if such were to be done, those dentists would doubtless come under the same rule regarding subsequent examinations.

(Dr. Dawbarn concluded his remarks by congratulating the New

Jersey society upon the admission of a lady member and paid a high compliment to ladies as students in any profession.)

New Jersey has a right to be proud of her requirements and I can give you one reason why you Dr. Crouse. can get a better law in New Jersey than you can in Illinois or New York or any other state in which they have colleges. I have come in contact with college opposition to the right kind of laws. In Illinois we have a good law, but it is not in force; we have a scalawag Governor who appointed shysters on the State Examining Board. One is not today a legal practitioner. I chased that matter up with a view of prosecuting the State Board and collected a large amount of evidence whereby I could prove that they simply sold for whatever price they could get a certificate to practice, and they have made no report of their finances to the state since Hanna was Governor. On the other hand, we have the encouragement of feeling we are going to have a better Governor and I have a pledge that we will get a better Board and we may come here and brag of what we do in our state. At the present time I am ashamed of them.

I have always advocated a National Board of Examiners as the controlling power of the dental educational institutes of this country; I believe yet that they will organize eventually and control what the qualifications shall be. They can do it in various ways; they might pass upon the colleges they would recognize without examination, for some colleges are better than others. But endeavoring to pass a law where you have a shyster college that will go into the legislature and have more influence than an educated man is very difficult. These fellows can drink whisky with the legislators and play cards with them and have more influence than a decent man. I have been in the legislature lobbying very considerably and I have been disgusted when old Huxman could come down from Chicago and knock me out in one round. He ran the German college in Chicago, which gave diplomas without the student being able to speak English. I think the Board of New Jersey make a mistake when they don't go in and help the National body elevate the standard; they are in a position to do it and I was sorry last year when they resigned. I did not think it was a good move then and I do not now.

Dr. Crouse said he found the opposition to proper requirements came from the colleges; he didn't say which colleges he meant, but afterwards he indicated that he meant the shyster colleges. I cannot sit here and listen to such an accusation against all the colleges, and I want him to say that it was the shyster colleges he referred to. Was it not so, Dr. Crouse?

Dr. Crouse.

Not altogether.

Dr. Patterson.

You spoke about trouble with the Illinois Board and I want to ask you if the respectable colleges in Chicago have supported that Board or not in the course they have pursued?

Oh no. But what I wanted from the legislature

Dr. Crouse. was a law that made every man stand examination,
no matter whether he had a diploma or not, or what
college he came from, and every college there fought it.

Dr. Patterson. I have nothing to say about that, but as a college man I want to say that I am perfectly willing that every student that we send out should be examined. Let every college stand on its own basis so far as that is concerned. But when Dr. Crouse made the remark that the opposition to higher educational requirements came from dental colleges I could not sit still until he had made an explanation of that remark.

Dr. Brown. Script to Dr. Osmun's paper that it was there. I knew that was going to spoil a good thing. I wish Dr. Osmun had either written the postscript and let it go alone or written his paper and let that go alone. We get all mixed up with the good thing and a bad thing; one a matter of general interest and the other a local matter. You have made me get on my feet and I am going to talk for an hour, and convince everybody here that the New Jersey Board were not wrong in retiring from the National Association. I will take that back, I won't talk an hour, but I would like to; however, I think I can convince you all in about three minutes.

The New Jersey Board retired for the sake of the other states, not for themselves; we would have loved to stay there and personally I took the greatest interest in it for ten years; I was a member of the Committee on Colleges and worked with Dr. Jack and with Dr. Faught and then I took the chairmanship of that committee. There was one thing I always claimed and fought for in that association year after year, which was that to succeed in raising the standard of dentistry, and in raising the preliminary requirements more particularly, the Boards must stand together and accept the rules and the laws on colleges as put forth by the National Association. If any state didn't do that I got on their back and hammered them in the neck just as quick as I could. It was a constant fight and every report of mine will show it. As long as eight years ago I suggested the calling of a meeting of the Boards of the Atlantic Coast states to formulate a plan by which an interchange of licenses could be made possible. That meeting was held here at Asbury Park and was well attended.

We discussed the matter carefully for two or three days, we drew up resolutions and we sent in recommendations to the National Association which were adopted. I was on a committee appointed to draft an outline of the law to be adopted by the different states so that the interchange could be made possible. The result of that was the law of New York and the law of New Jersey. Now our silver-tongued orator gets up and says that we are interfering with the cause of the interchange of licenses. Do not be carried away by oratory. I am no orator as Dr. Stockton is, but, like a certain other silver-tongued orator, he is all wrong. I have the facts and he has the oratory. The fact is that an interchange has been established between New York and New Jersey. There is no other interchange between any of the Boards of the National Association. There are going to be more in with New York and New Jersey; Pennsylvania will be with us and Delaware and Connecticut and lots of other states; they are all coming to it, but if we remain in the National Association we weaken the standard of every state there, because we have got to repudiate what we have always fought for and that is the acceptance of the rules and the living up to the rules of the recognized colleges. A list is put out by the National Association of the colleges which live up to the requirements of that association; then every state is requested—and rules have been made to require them—to accept that list and not examine applicants from any other school. There are a number of schools that give good dental education which do not require a preliminary education up to that standard. It was necessary to force them into line and the only way it could be done was for every state to adhere to that list. I was the one who was making that list, in connection with Dr. Faught and I know of what I speak, as no one else but Dr. Faught does; I know what we have gone through and I know what we had to fight, and the one great thing was that the states would not live up to those rules. I have stood up on the floor and fought for it just as I am fighting now. Then we have a new law, our standard is established; a preliminary requirement is established higher than that of the National Association, which I drew up myself. A man comes to us from a college not on that list, he is a graduate from the Normal School of this state and of a high school; he has a good general education. Can we examine him? No; his college is not up to the standard because it does not have the preliminary requirement necessary. He says, "I have them, why don't you examine me?" "We can't help it, we will." A man from the same school goes to another state that does not have the preliminary requirements and he is refused. They say, "New Jersey examined him, why don't you? They belong to your association."

There is the question. Could we stay in that National Association

of members and break their rules and not accept their laws as honorable men? Do you want us to do such a thing as that? I don't believe it.

Do the rules of the National Association require that graduates from the colleges on that reputable list shall be passed without examination? There is no such rule?

Dr. Brown.

I do not understand you?

Dr. Patterson.

Is there any rule in the Examiners Association that requires you to accept diplomas from colleges upon this published list without examination?

Dr. Brown.

There is no such rule in the National Association

Dr. Patterson.

Very well, it does not compel you to do it; put them into the examination.

Dr. Brown.

You do not understand me, or I do not understand you.

Dr. Patterson.

Perhaps I was not clear excepting in my own mind. The rules of the National Association do not compel the New Jersey Board to accept the diplomas of the colleges upon that list without examination.

Dr. Brown.

Not at all. That is not the question. The question is as to the colleges not on that list. We have to examine men from colleges, not on that list under our law.

Dr. Patterson.

Oh! Now I understand, but still I confess I cannot see the force of your argument as to why you cannot remain in the Association.

Dr. Brown.

The National Association saw it very well at Washington when we said we would go then and only consented to stay on because a number of them

begged us to go on and complete the work of the Committee on Colleges for another year, and when that year was up we sent in the delayed resignation. My correspondence with Dr. Edwards, which appears in the last report of the State Commission, will fully explain that.

Dr. Patterson.

If your requirements are higher, will your National Examiners Association kick you out?

Dr. Brown.

Not at all; we didn't wait to be kicked out.

Dr. Patterson.

They would honor your standard it seems to me and be glad to work with you.

Dr. Brown.

We are just as glad to work with them as we ever were. It was simply that we were not able to take their rules and live up to them.

Dr. Patterson.

If you lived up to higher ones it was all right.

You don't look at it in the way it is; it is not a question of living up to higher rules, but of breaking their rules. They say no Board can examine from any colleges except those on the list and we have to examine from colleges not on that list.

Dr. Sanger.

Do I understand Dr. Brown to say that in spite of the fact that according to their by-laws they can only be members of this association as a board, they can make rules for our state?

Dr. Brown.

No, they cannot bind anybody; it is a moral obligation that is all.

But do you mean to say that if you examine from colleges not on that list they will expel you from the National Association?

Dr. Brown. No

Dr. Sanger. Then I think you had better stay in. (Laughter and applause.)

Un closing the discussion.) In the first place
I want to go back again and refresh your minds
with the fact that the point that Dr. Brown referred

to when he said that I wanted to have the students passed without a diploma was simply a quotation from the law of West Virginia, and Dr. Brown thought it was a matter of my deduction.

In reference to this question of schools. When I commenced on that question I said to myself, "What does the term 'a common school education' mean?" I sent that question to a lawyer, and he sent me back Mr. Justice Dixon's opinion and then I took the precaution to send that to two or three other lawyers; I have had over twenty lawyers look at this paper for me and examine it carefully, and there has never been a dissenting voice on that point. I am just as sorry as Dr. Brown or anyone else is that the law does not say "high school." I am not guilty of splitting hairs, but I do not believe you can twist "common school" into "high school" education, because if it is a high school education, the constitution would make it obligatory for every district to have a high school, and Justice Dixon says that was not the intention of the law. I was on the legislative committee which framed this law and am just as much responsible for that as some of the others, but I did not understand it so at that time; if I had I would have written in the words "high school" and we ought to have it read so. I brought this up hoping that it would be amended.

This question of holding membership in the National Association has been pretty thoroughly discussed, but the point I want to make is

this: The National Association has no legal standing whatever; it is a voluntary association of the members of the state boards for the advancement of dentistry and I believe from the bottom of my heart that no greater mistake was ever made by New Jersey than in sending in her resignation, and I believe that the best interests of this state will be served if our Board remains in it, puts its shoulder to the wheel and tries to make them come up to the mark. (Applause.)

On motion the paper of Dr. Osmun was then passed.

Dr. Meeker read a paper entitled a "Quarter of a Century of Official Life in the New Jersey State Dental Society."

#### Discussion of Dr. Meeker's Paper.

I cannot let an occasion like this pass without speaking of the growth of this society, and while Dr. Osmun. I do not wish to cast any disparagement on any worker or member, the New Jersey State Dental Society owes its position very largely today to the unselfish devotion and labor of our secretary. (Loud applause.) I for one do not think I could sleep quietly tonight after listening to this paper without thanking him from the bottom of my heart. I have been a member now for twenty-three years and it would take hours and hours to tell all that he has done for the benefit of the New Jersey dentists, the New Jersey State Dental Society and the Central Dental Association. No one has yet been born who has the gift of oratory sufficient to do justice to his fidelity and faithfulness, and I for one am deeply indebted to him for all the help and instruction which I have received by attendance upon this society through the work and the character of the men whom he has secured to teach me and help me along in my professional life. I owe him a great debt of gratitude and I know I only voice the sentiment of every member and every visitor who has ever attended the meetings of the New Jersey State Society. (Loud applause.)

Dr. Stockton. I am only going to say just one word. We are known the world over and are known because of the success of our society, which has come about largely by what Dr. Meeker has done for us. People are willing and anxious to come and read papers here. There is no exhibition in the world like what we have here today; it is almost equal to the Paris Exposition in this particular. How do you have such a large exhibit? Why do you come here? Because the New Jersey Society is the success that it is, and it is so because Dr. Meeker has made it so. He has worked not only

days, but nights; he has made it so that we are proud today that we are members of the New Jersey State Society and we cannot let this occasion go by without thanking Dr. Meeker for all he has done, not for himself, but for us, and I am glad that I am a member of the society and that I have been in a small way a co-worker with Dr. Meeker. (Applause.)

As one of the younger members of this society Dr. Sutphen. I cannot keep my seat. I have been assistant secretary for two or three years and I know something of the labor necessary to prepare one annual meeting. I know that I am truthful when I say that before one annual meeting of the New Jersey State Society is ended, our worthy secretary has commenced operations for the next year, (applause) and every day of his life something is done. We have our various committees which each year devote a little time to perfect the work that is necessary in their different departments, but the secretary works all the time. Do you realize what that means? I suppose that perhaps in the last two or three years I have seen Dr. Meeker one evening a week for a few minutes when I would drop in and he was always working for the society. I never find him attending to his own affairs, but he is always working for the New Jersey State or the Central Society. We cannot too highly honor and respect him for it, and as one of the younger members of the society I rejoice that we have one person who is so thoroughly, devotedly and conscientiously interested in the welfare of our society and the upbuilding of our profession, and I say with all the emphasis that I can command, which is little enough, that when he says certain things should be done, he has well weighed the matter before he makes the statement, and it can be relied upon every time. He never makes a statement he does not know to be true and we should honor him for it and stand by him.

As a stranger I would record my appreciation of the many courtesies received at Dr. Meeker's hands during the past ten years.

Dr. Chase. In the organization of all societies there is always someone who has to take the brunt of the work and see that things run smoothly, and the New

Jersey State Dental Society has been blessed with having such a man as Dr. Meeker to take that position. I want to thank Dr. Meeker for the position which I hold in the dental world. He got me to join this society and through the influence brought to bear by him and other members I was induced to write papers, and that has been the thing that brought me out and gave me confidence in myself to make my appearance before any organization. I congratulate the society that they have such a man and

should we in any way lose his services I don't know, but I think it would puzzle the members of the society to find one to take his place, and I think this society will always do itself honor by honoring Dr. Meeker.

Though the hour is late I cannot forego the privilege of paying a tribute to Dr. Meeker. As long ago as I can remember anything in dentistry I recall a helping hand extended by him to me. I have been guided by his counsel and helped in my dental society experience and carried up step by step without wavering because he has been behind me, and I feel that there is no man in this profession whom I can more proudly call my friend than our secretary, Dr. Meeker. And so I want to pay a tribute to him and say to him "God bless you."

I think every member of this society owes a deep debt of gratitude to our worthy secretary. He has tutored almost every one of us and as has been said here we do not know where we can find his equal and I hope it will be a long time before we shall be required to look for one to take his place; I hope he will be with us yet for a long time and be as useful in the future as he has been in the past, and we shall all feel satisfied that as long as Dr. Meeker occupies the position he holds now the New Jersey State Society will retain their prestige.

I think Dr. Sanger struck the keynote when he referred to our friend as his guide. Dr. Meeker has been the guide of this society for years past and when he paid me the compliment of stating that I had made a success of the exhibit committee this year I want to say that it was Dr. Meeker who made it possible. It was his work in the years past that made the chairman of the committee work harder to make the exhibits a success, and so he is with each and every committee.

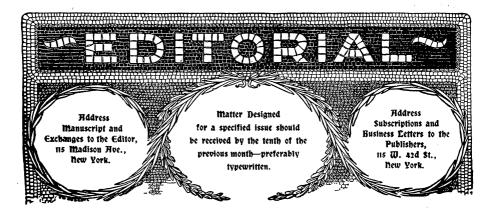
We all owe a debt of very great gratitude to Dr. Meeker, and I move you when this vote is taken we make it a rising vote.

Dr. Sanger.

I move that we all rise and thus show our appreciation of Dr. Meeker's services.

(The members all rose with cheers for Dr. Meeker.)





## Preliminary Requirements in New Jersey.

Discussing the New Jersey statute as it is, and as it has been construed by the Dental Commission of that State, in the editorial in our August number, the following language was used:

"The members of the New Jersey State Board of Dental Examiners seem to have an extraordinary notion of the powers vested in them by the laws of New Jersey. They have represented to the New York Board of Regents that their standards for license are as high as those of New York, and under this representation they have obtained an agreement for interchange of license between the two states.

"The requirements in New York state exact that the candidate shall have had preliminary education equivalent to high school graduation. The requirements in New Jersey are that the candidate shall 'have received a preliminary education equal to that furnished by the common schools of this state (New Jersey).' The New Jersey Board construes this to mean high school graduation, but it is quite evident that such was not the intention of the act, nor is it likely that such a claim by the Board would be upheld by a court, if resisted by an applicant for license. The citizen of a state is not expected to wander from the locality in which he resides, in order to comply with the laws of his state in acquiring a free education. High schools exist in only a few of the large cities of

New Jersey, and consequently the residents of other sections could not be expected to move from their homes and pay board in another city, in order to obtain a free education in a high school. Thus the law in requiring common school education, only means the highest education which is common to all localities throughout the state."

About the time when the above was written, Dr. J. Allen Osmun read a paper before the State Society of New Jersey (published in this issue) in which he likewise raised this point. In the discussion which followed Dr. G. Carleton Brown declared that Dr. Osmun had been on the legislative committee which had drafted the law; that he knew that the intention of the committee had been to increase the preliminary standards to the equivalent of high school graduation; and that it was reprehensible in him now to argue that the statute did not erect the desired standard. In reply Dr. Osmun claimed that he still favors the higher standard, but that after all laws must be executed as they appear in the statutes and not as their devisors may have intended.

There cannot be any doubt that Dr. Osmun was right in calling the attention of his State Society to the difference between the actual wording of the statute, and the interpretation thereof by the state licensing board. It should be the aim of all state boards to execute the laws so that there cannot be any validity in a claim that the laws are operated in the interests of existing practitioners rather than of the community at large. A due observance of the law obtains for the citizens of a state dentists of standard proficiency. An undue observance of the law may act contrarily by restricting the citizens to the services of the existing and older practitioners who are not necessarily more skilful than the new graduates. It is conceivable that had the New Jersey Board continued to exact more than the law demands, the time might come when rejected candidates would appeal to the court demanding an injunction to compel examination, with the result that the law and the licensing board would fall into disrepute in the state.

The following extract from a Newark newspaper indicates that the Dental Commission had misconstrued the statute.

"Governor Voorhees has been sustained by State School Superintendent Baxter as to the meaning of a 'common school education' for those who desire examinations before the State Board of Dentistry. This

board issues diplomas entitling the holders to practice dentistry in the state. It has refused a number of applicants because they did not have a 'high school education.' The board held that the law called for 'an education equal to that furnished by the common schools of the state,' and that this clearly meant a 'high school education.'

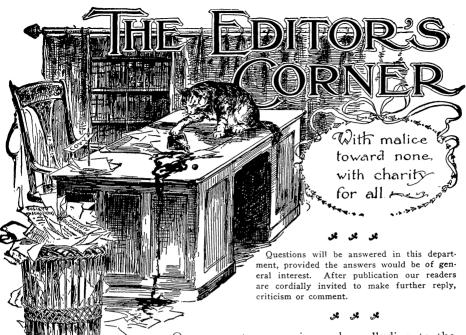
"The governor, to whom several students appealed, took a different view, and it was agreed to leave the question to the state school superintendent. Mr. Baxter said that he must uphold the governor on a technical construction of the law, and not because he favors any lowering of the standard. He said the high school, instead of being the common, is the exceptional school, and is alone found in the most exceptional centers of population, therefore there is no authority for making a high school education a prerequisite for admission to an examination to practice dentistry."

From this it is seen that the contention in these pages was correct, and now that the matter has been decided, it would seem that the agreement between New York and New Jersey in regard to interchange of licenses must be abrogated, since it specifically rested upon the New Jersey Board's interpretation of their law.

It also now appears that the resignation of the New Jersey Board from the National Association of Dental Examiners, was to say the least, ill-considered. The Jerseymen claimed that they could no longer affiliate with the National body because their own law exacted so high a standard,\* whereas we now find that their law makes no such exaction. Moreover, it is interesting to record in this connection that New York and Pennsylvania, with their higher preliminary requirements have recently joined the National Association of Dental Examiners.



<sup>\*</sup>See Dr. Carleton Brown's explanation in the discussion of Dr. Osmun's paper, pages 851-2.



On one or two occasions when alluding to the troubles in New Jersey we have expressed the opinion that the other members of the Dental Commission were more solicitous about ridding themselves of their associate, Dr. Meeker, than they openly admitted. Recently, however, they acted boldly, and in a final effort to oust Dr. Meeker they preferred charges against him, which they filed with the governor, asking for his removal. A significant fact in this connection is worthy of note. In the law of

1890 a clause provides that in case of a vacancy caused by any means, the state society shall nominate a candidate for the unexpired term of the retiring or deceased member, and that the governor shall then appoint. In the new law this was altered so that the appointment was placed in the hands of the governor, and nomination by the state society was rescinded. Thus the powers of the state society were curtailed, by a law prepared and introduced into the legislature by a committee of its own creation. Is it possible that the present situation was foreseen so long ago, and provision made against a possibly angered state society? However this may be, the effort to obtain the removal of Dr. Meeker failed signally. After a hearing before the governor, both sides appearing with counsel, the governor dismissed the charges. In relation to this matter the resolutions passed by the Central Dental Association afford further information.

Dr. Meeker Exonerated By his Society. The following resolutions were passed at the meeting of the Central Dental Association held October 15, 1900:

"Whereas, Since our last meeting certain charges have been preferred against Dr. Chas. A.

Meeker, the man who was one of the founders of this society, and who has continually been an officer of this society for twenty-one years, during which time he has served this society with distinguished faithfulness; and

"Whereas, Said charges were made against him by G. E. Adams, G. Carleton Brown, F. C. Barlow and E. M. Beesley, his fellow-members of the Dental Commission of the State of New Jersey, all of whom are likewise members of this society and subjects to its discipline, and

"Whereas, Said charges, filed with the governor of this state accuse Dr. Meeker of wrongdoing and incompetency, in that they allege that in a specific case he did award to a candidate twenty votes, whereas his accusers, after considering in a secret meeting the same papers, found that but six questions had been correctly answered, out of a total of thirty, so that the candidate should have received but six votes; and,

"Whereas, At a public trial before the governor, Dr. F. C. Barlow, one of the accusing members of the commission, under oath did testify that he had in the past examined under two of Dr. Meeker's subjects, so that he, Dr. Barlow, did feel competent to judge of the papers in dispute, and that he had examined the papers, and had found that the candidate had correctly answered but six questions, and,

"Whereas, Dr. F. C. Barlow still being under oath, on cross examination was made to express his opinion separately of each of the thirty answers in the disputed papers, with the result that he admitted that twenty-two of these answers were wholly or in part correct, thus contradicting his affirmative testimony that but six were correct, and

"Whereas, The governor has rightfully dismissed the charges and exonerated Dr. Meeker, be it

"Resolved, That it is the opinion of this society that our honored member, Dr. Meeker, has been the victim of an unjustifiable attack, and that he is entitled to and is hereby tendered the hearty congratulations of us, his fellow members, upon his refutation of the accusations made against him. And further be it

"Resolved, That these resolutions be spread upon the minutes, and published in the dental journals, as well as in the public press of this state, wherein the charges against Dr. Meeker have appeared, to the just end that he may be fully exonerated.

"Introduced by F. Edsal Riley, president, New Jersey State Dental Society.

"Seconded by Wm. L. Fish, vice-president, New Jersey State Dental Society; H. S. Sutphen, president Central Dental Association; Frank G. Gregory, vice-president Central Dental Association; C. W. F. Holbrook, C. S. Stockton, J. S. Vinson, John A. Voorhees, Lloyd G. Morgan, William P. Richards, W. H. Pruden, Nelson M. Chitterling, secretary Central Dental Association; Harvey Iredell, C. E. C. Smith, R. M. Sanger, Henry S. Hull, J. L. Crater, F. L. Hindle."

On the same occasion the following resolutions were presented by Dr. Benj. F. Luckey, and unanimously adopted:

Dr. Meeker. "Whereas, Charges of incompetency and inefficiency have been lodged with the governor of this state against a member of the Board of Registration and Examination in Dentistry, and

"Whereas, Such member of the Board of Registration and Examination in Dentistry is also a member of this society in good standing and of good repute, and

"Whereas, Such member having practiced dentistry in this state for more than thirty years and during that time been one of the most progressive and active members of the profession—having held all the offices of honor that could be bestowed by both the State and Central Societies -who before the operation of the present dental law, was for years the state prosecutor of violators of the dental law, the duties of which office he discharged with marked ability and discretion; who has been honored with office by the National Association of Dental Examiners, and who has been regarded for many years by the profession in this state and practically every state in the United States, and in many parts of South America and Europe as a professional man of ability and attainments, one whose professional course was worthy of emulation by the younger members of the profession; one who by his fidelity to trusts imposed upon him has done more to elevate and advance the interests and good name, as well as fame of the New Jersey State Dental Society and the Central Dental Association of Northern New Jersey than any other member of either of the societies, and one who has never before been charged with dereliction or neglect in the discharge of official duties, it seems right and proper that we, the members of the Central Dental Association of Northern New Jersey, in regular meeting assembled on this fifteenth day of October, 1900, in the City of Newark, New Jersey, should give public expression of our feelings and sentiments concerning the charges that have been made against our fellow member and treasurer, Dr. Charles A. Meeker, of Newark, therefore, be it

"Resolved, That we, the members of the Central Dental Association of Northern New Jersey, express to Dr. Charles A. Meeker, a member of this society, our confidence in his professional ability, his fidelity to duty, and his untiring devotion to the cause of dental education and advancement. And be it

"Resolved, That a copy of these resolutions be forwarded to Hon. Foster M. Voorhees, governor of this state, and also spread upon the minutes of this society."

Theresting Statement British and American Homes in Paris that have accomplished so much and that wish to accomplish so much more did they but have the funds to do so. Undoubtedly many Americans would be glad to contribute to the work did they but realize the purposes and the need of the Homes. In a letter to the London Times, Mrs. Ada M. Lewis, the president of the British and American Homes in Paris, sets forth some of the reasons why her philanthropy should especially appeal to Americans. Here are some of them:

"A few days ago an American girl of twenty-one obtained a situation through a French agency in Paris. Upon showing the agreement—binding her to remain for two years—which she had signed on papier timbré, to an American lady, she persuaded her to destroy it. Upon hearing this, the agent sent the girl a second agreement with an English translation, both upon papier timbré, signed by 'the gentleman,' the agent, and leaving a place for the girl, who did not sign.

"Meanwhile she called at one of our homes in Paris, asking for admission, which was promised, and left, saying she had to see some one. Presumably she went to the agent to return the unsigned document.

"A day or two later her body was floating on the Seine, her head bald, bereft of her hair, her face terribly swollen, beyond recognition save for her clothes and that she had the address of our homes in her pocket.

"The late Dr. Thomas W. Evans, the famous American dentist who established himself in Paris, thought once with many others that 'an American girl could always take care of herself.' But, after verifying a few facts given by us, he became of another mind, and the time and money he spent upon Lafayette House, of which her royal highness the Princess of Wales was the gracious patron, increasing the number of bedrooms

from seventy to one hundred, is well known to hundreds of American girls helped by him and Mrs. Evans.

"It was his intention to endow this home—an intention lost, alas, by the delay of a day. When his lawyer and nephew entered his bedroom to witness the new disposition of his property, he had just passed into eternity.

"So the old will was valid, drawn up long before the attention of Dr. Evans was called to the fate and surroundings of his young country-women in Paris. Lafayette House is no more, being rented with the mansion of Dr. Evans, which it adjoined, by the French government as a 'Palais des Souverains.'

"Washington House, 18 Rue de Milan, one of our homes, was intended to represent the American interest in our association, which, since 1872, has befriended probably thousands of American girls.

"Some of the most generous and well-known American philanthropists subscribed toward the first payment upon this property, fourteen years ago. Until a few days ago it still lacked £7,400.

"To help us clear this indebtedness her royal highness the Princess Christian, of Schleswig-Holstein and of Great Britain, greatly honored us by becoming our patron, and £1,000 just paid down has been the response.

"May I propose to the wealthy and generous Americans now on this side to spare an hour to visiting this home, which, within the last few weeks has received sixty-seven of their young countrywomen? They can speak with them, find out what attracted them to Paris, and satisfy themselves upon many points of a work not so easy to explain at a distance.

"The pen of a few sympathetic visitors could wipe out our adverse balance of £6,400, which has for so many years extracted its pound of flesh in interest—an incubus unworthy of luxurious Paris.

"This, considering the numbers of friendless girls from America and our colonies caught in the toils of unscrupulous agents who persuade them to sign agreements apparently correct and businesslike, to which three or four words are added rendering their conditions immoral, and so leading to the alternative of despair—death before dishonor—this would be but a fitting atonement to the dead and disfigured body which silently floated on the Seine in the presence of thousands of her country-people seeking their pleasure at the Exposition, each one of whom would have helped her, had they but known.

"Now they know--?

"Contributions toward £6,400 may be sent to Mr. F. A. Bevan, 54

Lombard street, E. C., London; Messrs. J. Munroe & Co., 7 Rue Scribe, Paris, or to myself, for 'Washington House.' "—New York Sun.

Artificial Ceeth Swallowed and Recovered. Oesophagotomy, one of the rarest of surgical operations, was successfully performed last Friday in the Bushwick Hospital, Brooklyn, by Dr. M. E. Peterson, assisted by Professor Bristow and the hospital staff.

Mrs. Kate Hoffman, the patient, of 586 Hamburg avenue, had the day before accidentally swallowed a part of the upper plate of a set of artificial teeth. The fragment lodged in her oesophagus, pressing against the trachea, and the woman was slowly being choked to death.

Though fully understanding the danger in the operation, knowing it to be the only chance for her recovery, Mr. and Mrs. Hoffman gave the required permission. Most of the prominent surgeons in Brooklyn were in the operating room when the woman was placed under an anaesthetic.

Dr. Peterson made the first incision into the throat just below the lower maxillary bone. Professor Bristow and others stood in readiness to check any hemorrhages. While dissecting the tissues Dr. Peterson was the center of attention. The variance of a hair's breadth with the knife meant death. When the oesophagus was exposed a vertical slit was made in it and the broken plate removed with forceps.

Equally interesting has been the treatment of the case since. The slightest movement of any part of the throat or muscles of the head might cause the patient's death. As soon as the wound was treated antiseptically the woman's head, the upper part of her body and her arms were incased in a plaster of paris cast. She has been fed artificially, and nothing in the way of food or drink allowed to pass into the stomach through the injured passage. Surgeons examined the wound yesterday, and the indications were so favorable that Dr. Peterson said that the woman would recover.

Mr. Hoffman is highly pleased over the operation. The accident by which the broken plate passed into her oesophagus occurred at the dinner table on Thursday.—Newspaper.





#### Craite d'Anatomie Humaine.

By Drs. Amoedo, Branca, B. Cuneo, P. Fredet, P. Jacques, Th. Jonnesco, E. Laguesse, L. Manouvrier, A. Nicholas, M. Picon, A. Prenant, H. Rieffel, Ch. Simon and A. Soulee.

Under the direction of Prof. P. Poirier, Paris, and Prof. A. Charpy, Toulouse.

Part III. of Vol. IV.

Publishers, Masson et Cie., Paris, 1000.

Of this excellent and comprehensive treatise upon Human Anatomy, up to April 1st, 1900, four volumes (lacking the fourth part of Vol. II.) have been published. Other portions of the work are in course of preparation.

The general plan of the work is encyclopedic. Human anatomy as a science has expanded so greatly, and the demands of those interested in its study for fulness and scientific accuracy even to minute details have become so exacting that the preparation of a treatise satisfactory to advanced students, teachers or practitioners, is far beyond the capacity of any one single mind. The teacher of a medical specialty demands that his student's foundation text books shall be as full and complete in all that concerns his special branch as though written for it alone; and still farther demands, in order that the relation of his specialty to others may be fully appreciated, that they shall be, regarding other specialties, equally full and comprehensive. Medical specialism looks to penetration, not isolation. To meet this condition this treatise on human anatomy has been written under the general direction of Professors Poirier and Charpy, by a corps of able collaborators.

It is in size, large octavo; fully illustrated, colors being used effectively, to emphasize special features of the drawings. The first volume

treats upon embryology and osteology; the second, on the muscles and the circulations; the third on the nerves; the fourth on the digestive tract. With the third part of this fourth volume we are most concerned the annexes of the digestive tract, the teeth, salivary glands and the viscera. The article upon the teeth, covering some sixty-eight pages, with fifty-eight illustrations, has been contributed by Dr. Amoëdo, a dentist and a dental writer, well equipped for the task by his thorough knowledge of the dental literature of his own and other lands. His description of the teeth, their peculiarities of form and function, their minute anatomy, their relation to each other and to adjacent parts is well written; sufficiently full and sufficiently illustrated for a work not exclusively dental. considering mooted points in dental histology, he seems to have embodied the latest that could be gleaned in dental journals from controversies and reports of original investigators in an earnest effort to bring his contribution well up-to-date. He has so presented this matter that the known, the probable, and the unknown, is at once apparent to the reader. In doing this he has in no sense warped the evidence presented; his conclusions, so far as expressed upon these mooted points, are cautiously given, leaving to future investigations the final settling of the problems. We specially note this in his remarks upon the termination of the nerve in the dental pulp, page 644; the dental ligament, page 646; and the dental-alveolar articulation, page 648.

On page 655 we find a diagram illustrating the progressive calcification of the superior permanent teeth taken from a paper by Dr. C. N. Peirce, (Dental Cosmos, Vol. XXVI., August, 1884, page 450), and immediately over it a radiograph of the inferior maxilla of a child six and a half or seven years of age, showing the actual condition of affairs, which serves a double purpose. Making due allowance for variations, it confirms the accuracy of Dr. Peirce's diagram; it also illustrates, graphically, how marvelously modern science assists in accurately observing and delineating life forces at work.

Dr. Amoëdo closes his contribution with a bibliography, a commendable feature. We note a few errors in names; those of Drs. W. G. A. Bonwill, and I. Norman Broomell, are not given in full; the vowels in the name of Dr. C. N. Peirce are transposed; cut No. 327, page 642, should be credited to Prof. James E. Garretson; and quotations from "Tomes" should have been credited either to John, or Chas. S. Some are from the father and some from the son.

The following chapter, on the salivary glands, by Prof. Poirier, contains much of interest to a dentist, especially to one who enters at all the domain of oral surgery. The descriptions in the text are clear and precise, entering minutely into the anatomy of the organs, and their sur-

roundings. The structure of the salivary glands, their microscopic anatomy, is treated in the following chapter by E. Laguesse. The two chapters cover thirty-six pages, with twenty-three illustrations. The other portion of the book cover the organs within the abdomen concerned in digestion. This part of volume four, devoted exclusively to the organs associated with the digestive tract, contains nearly five hundred pages and three hundred and sixty illustrations. The completed work will be a notable addition to French medical literature, one in which our profession will have a share.

W. H. T.

## notions Generales de Pathologie.

By Dr. Auguste Marie, Paris, France.

'272 Pages, with 43 Illustrations.

Publishers, J. B. BAILLIERE ET FILS, Paris, 1900.

Professor Launois, who contributes to this little volume of "Notes on General Pathology" a well written preface, in its opening paragraph says: "The constant and growing evolution of dental science requires constant revision of all the studies pursued in the professional schools. In addition to a thorough knowledge of the special diseases of the teeth and of the mouth, the student must have, to make his education complete, a fair insight of general pathology, of its ins and its outs, in order that later he may be fully competent to perform his professional duties.

"M. Godon, its director, desiring to maintain at its best the instruction, theoretic and practical, of the Dental School of Paris, requested each of its professors to condense in a manual a résumê of his lectures."

The volume before us is the second of a series of seven manuals covering fully the usual studies of a dental school, written in response to this request. It does not, it was not intended to take the place of more pretentious and complete text books upon this important science. It is, and was intended to be, a handy pocket volume for ready reference to those topics constantly confronting the student; something to assist in recalling and enforcing the oral lecture, and to fix in his mind in orderly sequence the foundation principles of general and special pathology. The author has well performed his task. With sufficient fulness to meet the object in view he has in these "Notes on General Pathology for Dental Students," without sacrificing method, clearness, or scientific ex-

actness, presented to French readers, students and practitioners, in small compass, a great deal of useful up-to-date information well suited to their needs. Unjustly, I think, the profession is disposed to slight publications like this. In college work especially, they have a place incontestably their own. Their small size invites frequent revision. Their little cost makes them companionable alike, in the office, the laboratory or the lounging room. They neither crave the exclusiveness of the bookcase nor resent the surroundings of the work bench; and are more apt to be replaced by a later edition than would be more stately tomes.

W. H. T.





# The Pennsylvania Association of Dental Surgeons.

The Pennsylvania Association of Dental Surgeons, which rejoices in being the oldest dental organization of this country, held its regular monthly meeting at the offices of Dr. Chupein, No. 1408 Pine street, Philadelphia, October 9. It being the time for electing officers for the ensuing year, the following officers were unanimously elected: President, Dr. Geo. Conquest Anthony; Vice-President, Dr. J. Clarence Salvis; Treasurer and Librarian, Dr. Wm. H. Trueman; Secretary, Dr. Theodore F. Chupein.

GEO. CONQUEST ANTHONY, President.

Philadelphia, Pa.

## Pennsylvania State Board of Dental Examiners.

The State Board of Dental Examiners of Pennsylvania will conduct examination simultaneously in Philadelphia and Pittsburg, December 17, to 20.

Applications for examination must be made to Hon. James W. Latta, Secretary of the Dental Council, Harrisburg, Pa.

G. W. KLUMP, Secretary.

Williamsport, Pa.

#### Ohio State Board of Dental Examiners.

The next meeting of the Ohio State Board of Dental Examiners will be held in Columbus, O., beginning Tuesday, Nov. 27, 1900. All those desiring to take the examination should write for full particulars to Dr. L. P. Bethel, Kent, O.

L. P. Bethel, Secretary.

Kent. O.

## Maryland State Board of Dental Examiners.

A meeting of the Maryland State Board of Dental Examiners will be held at the Dental Department of the University of Maryland, Baltimore, Thursday and Friday, Nov. 15 and 16, for the examination of candidates to practice dentistry.

The written examinations will be in operative and mechanical dentistry, pathology, therapeutics and materia medica, anatomy and physiology, chemistry and oral surgery, and candidates will be required to insert a gold filling in the mouth and exhibit specimens of prosthetic work properly vouched for.

Application blanks properly filled, accompanied by the fee of ten dollars, must be filed with the Secretary prior to day of examination.

F. F. DREW, Secretary.

701 N. Howard street, Baltimore, Md.

## Northern Towa Dental Society.

At a meeting of the Northern Iowa Dental Society, held at McGregor, Iowa, September 4-6, the following officers were elected for 1900-01: President, W. R. Clack, Clear Lake; Vice-President, J. A. Walter, McGregor; Secretary, Wm. Finn, Cedar Rapids; Treasurer, H. W. Rizer, Lansing. Next meeting to be held at Lake Okoboji, the first week in September, 1901.

WILLIAM FINN, Secretary.

Cedar Rapids, Iowa.

# Che Institute of Dental Pedagogics.

The seventh annual meeting of the Institute of Dental Pedagogics will be held in Nashville at the Maxwell House, beginning at ten o'clock Thursday, December 27, 1900, and will continue three days.

The program will be forwarded to all of the journals in time for publication in the December issues. Every one interested in dental teaching should feel it his duty to attend, as it is his privilege to speak on any subject on the program.

The interest of last year will be maintained and the plan of developing thoroughly few topics given a trial.

A most cordial invitation is extended to all, especially those who are teachers.

Executive Committee. 

Henry W. Morgan,
D. N. Cattell,
W. Earl Willmott,